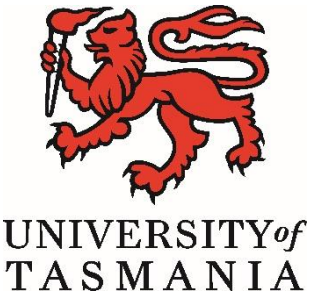

The Reporting of non-GAAP Profit Figures in Australia: An Impression Management Perspective

by

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Dedication

This thesis is dedicated to my wonderful family, Greg, Eilish and Emmet, with much love and thanks.

Abstract

The reporting of non-GAAP profit figures (profits calculated other than by using International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP)) is a phenomenon that has been observed worldwide over the past two decades. Two possible motives for the practice have been suggested: either management is attempting to provide incremental, value-relevant information to assist shareholders and potential investors in decision making, or it is behaving opportunistically and attempting to mislead shareholders and investors by managing their impression of the company's performance. Prior studies into the practice of reporting non-GAAP profits have been concentrated in the United States, where strict regulation has been in place since 2003, and in Europe, while little research has taken place in an Australian context.

This study contributes to the literature by investigating the reporting of non-GAAP profit figures by Australian companies. Initially, a broad approach to the topic is adopted, with two research questions developed to investigate which company characteristics and specific events might influence the decision to report a non-GAAP profit figure. The study then narrows the investigation to concentrate on the issue of opportunistic behaviour and the use of impression management tactics by companies to emphasise non-GAAP profit figures compared to the GAAP profit figures. Two further research questions investigate which company characteristics and specific events might influence the use of impression management tactics by non-GAAP profit reporting companies.

The study uses a population of the top 200 companies (based on market capitalisation) on the ASX, and data was collected from the years 2004 to 2015 inclusive. The chosen timeframe allows investigation into the effect specific events, including the introduction of IFRS, the Global Financial Crisis (GFC) and the release of the Australian Securities and Investments Commission's (ASIC) Regulatory Guide 230, had on the reporting of non-GAAP profit figures. The effect of these events on the use of impression management tactics to emphasise the non-GAAP profit figure compared to the GAAP profit figure is also investigated. Content analysis of press releases concerning annual results, and annual reports was used to determine

the extent of disclosure and emphasis given to both the GAAP and non-GAAP profit figures. Quantitative analysis was then undertaken to explore each of the research questions.

The results indicate that the reporting of non-GAAP profit figures by Australian companies increased steadily over the twelve-year period. Larger companies and those that were more highly leveraged were more likely to report non-GAAP profit figures for most years of the study. Reporting bad news in the form of a decrease in GAAP profits or a GAAP loss was also a significant factor influencing the decision to report a non-GAAP profit in several years. The specific events investigated did not affect the decision to report a non-GAAP figure significantly with the exception of the GFC, which saw a significant increase in companies reporting a non-GAAP profit figure.

Results concerning the use of impression management tactics show more highly leveraged companies and those reporting bad news were significantly more likely to use tactics to emphasise the non-GAAP profit figure over the GAAP profit figure in the total sample and some individual years of the study. The GFC and the introduction of the ASIC Regulatory Guide 230 also significantly influenced the use of impression management tactics to highlight the non-GAAP profit figure compared to the GAAP profit figure. The GFC saw an increase in the emphasis towards the non-GAAP figure and the release of the ASIC Regulatory Guide prompted a change in emphasis towards the GAAP figure.

The study highlights issues concerning the use of impression management tactics and opportunistic behaviour and the need to inform shareholders and potential investors of this potentially misleading practice. It also highlights the need for ASIC to remain vigilant in its pursuit of both informing companies of regulations and enforcing Regulatory Guides so that the positive changes to reporting practices observed with the release of the Regulatory Guide continue.

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Chapter 1

Introduction

1.1 Introduction

The reporting of earnings or profit figures which are calculated other than by using International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP) is a phenomenon that has been observed worldwide over the past two decades. The practice is particularly prevalent in company press releases issued to report the annual results (i.e., annual results press releases) and in annual reports. In Australia, concern has been expressed by regulators, professional bodies and auditors regarding the practice. Extant literature has proposed two possible motives for the practice, either management is attempting to provide incremental, value-relevant information to assist shareholders and potential investors in decision making, or it is behaving opportunistically and attempting to mislead shareholders and investors by managing their impression of the company's performance. This study uses an agency theory perspective to investigate this phenomenon in an Australian context by examining the practice of reporting non-GAAP profit figures by Australian companies, registered schemes and disclosing entities (for simplicity hereafter referred to collectively as 'companies'). The term 'non-GAAP' rather than 'non-IFRS' is used in this study as the timeframe covers the period before the introduction of IFRS in Australia.

1.2 Background to the Study

The practice of reporting of non-GAAP profit figures is prevalent across many parts of the world, with a number of studies into the practice having been conducted in the United States of America (US) (e.g. Black et al. 2017; Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2004, 2006b; Frederickson & Miller 2004; Johnson & Schwartz 2005; Lougee & Marquardt 2004) and a limited number in European countries (e.g. Andersson & Hellman 2007; Guillamon-Saorin, Isidro & Marques 2017; Hitz 2010; Isidro & Marques 2013; Koning, Mertens & Roosenboom 2010). The findings of studies from the US are not necessarily applicable to the situation in Australia as, unlike in Australia, the practice of reporting non-GAAP profit figures has been highly regulated in the US since 2003. Industry

studies have reported the prevalence of the practice in Australia (Deloitte 2009; KPMG 2010a, 2011). However, to date there has been little academic research into this phenomenon, and the reasons for the practice, in an Australian context.

In extant literature, arguments both in favour of and against the practice have been put forward. Arguments in favour support the incremental, value-relevant motive, maintaining that the resulting figures better represent underlying, core or operating earnings of companies (Black et al. 2012). The non-GAAP profit figures are considered more informative numbers which allow better evaluation of a company's performance (Entwistle, Feltham & Mbagwu 2004). Arguments against the practice raise concerns about a lack of transparency, definition or consistent format for the figures which makes comparison between companies difficult (Brody & McDonald 2004; Halsey & Soybel 2002; Heitger & Ballou 2003). Non-GAAP profit figures are both company-specific and time-specific (Bryan & Lilien 2004; Sek & Taylor 2011) with critics suggesting companies can report earnings 'any way they want' (Brody & McDonald 2004, p. 37).

These concerns prompted a response in Australia, with the Australian Institute of Company Directors (AICD) and the Financial Services Institute of Australia (FINSIA) issuing the guideline: *Underlying Profit: principles for reporting of non-statutory profit information* (Australian Institute of Company Directors [AICD] & Financial Services Institute of Australasia [FINSIA] 2009) in March 2009. These guidelines are voluntary guidelines from professional bodies that members are encouraged to follow. In December 2011, the Australian Securities and Investments Commission (ASIC) issued Regulatory Guide 230: *Disclosing non-IFRS financial information* (Australian Securities and Investments Commission [ASIC] 2011). It is anticipated that the ASIC guidelines will have a marked influence on how non-GAAP profits are reported in Australia, being issued by the corporate regulator. Even so, it should be noted that ASIC Regulatory Guides provide an explanation of how ASIC interprets the law and are not actual law.

The study investigates the reporting of non-GAAP profit figures in Australia focusing on the opportunistic behaviour perspective, as concerns surrounding the phenomenon of reporting

these figures were significant enough to prompt responses from AICD, FINSIA and ASIC. The presence of opportunistic behaviour is identified through the use of impression management tactics concerning emphasis. Impression management tactics concern how companies present information in order to manage, influence and persuade readers to perceive the company more favourably (Godfrey, Mather & Ramsay 2003; Hooghiemstra 2000; Neu 1991; Neu, Warsame & Pedwell 1998; Samkin & Schneider 2010). As noted above there have been several studies concerning non-GAAP profit reporting in the US and this study responds to calls for more research into the phenomenon in an Australian context (Cameron, Percy & Stevenson-Clarke 2012; Marques 2017) where, until 2011, the practice was not constrained by regulation as it was in the US. There has been little to no research into the use of impression management tactics and non-GAAP profit figures in an Australian setting, particularly their use in press releases. Two Australian studies that did take an opportunistic perspective were Cameron, Percy and Stevenson-Clarke (2012), who looked at annual reports only and covered a period before the release of the ASIC Regulatory Guide, and Johnson et al. (2014), who conducted an experiment using university students thereby not investigating actual disclosure documents.

1.3 Research Questions

As noted above, two contrasting motives have been proposed to explain the practice of reporting non-GAAP profit figures. Either management is attempting to provide value-relevant information incremental to that provided by the financial report or it is behaving opportunistically and using impression management to report and emphasise what is generally a better result. Although these contrasting perspectives could form 'two competing schools of thought' (Merkl-Davies & Brennan 2007, p. 117) and be considered mutually exclusive, some have argued that the two explanations are not necessarily mutually exclusive. It is possible that managers are attempting to provide incremental, value-relevant information in the form of non-GAAP profits but at the same time are deliberately or inadvertently presenting the information in a misleading manner by using impression management tactics (Entwistle, Feltham & Mbagwu 2006b; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Libby & Emett 2014; Young 2014). Young (2014, p. 451) argues that 'informative reporting and strategic disclosure do not represent mutually exclusive explanations' for non-GAAP reporting behaviour and proposes that both motives

likely co-exist with particular motivations and reporting incentives varying depending on time and the firms involved. He further explains:

> (T)he dilemma for investors and regulators is how to give management freedom to use non-GAAP earnings to communicate their private information regarding key earnings components while simultaneously limiting management's ability to employ such disclosures opportunistically (Young 2014, p. 447).

Non-GAAP profit figures may be strategically emphasised to influence perceptions of the company's performance and may mislead shareholders and prospective investors, particularly those that are less experienced or less 'sophisticated' (Elliott 2006; Frederickson & Miller 2004; Godfrey, Mather & Ramsay 2003; James & Michello 2010; Marques 2010; Merkl-Davies & Brennan 2007). Attempting to address this opportunistic behaviour was a key objective of both the guidelines on reporting non-GAAP profits released by AICD and FINSIA and the ASIC Regulatory Guide 230 (AICD & FINSIA 2009; ASIC 2011). This study provides valuable information for both regulators and shareholders/potential investors by investigating which company characteristics and specific events influence not only a company's decision to report a non-GAAP profit figure, but also the use of impression management tactics when reporting such a figure.

The study initially adopts a broad approach to the topic of non-GAAP profit reporting by investigating what characteristics and events might influence the decision to report a non-GAAP profit figure. This is examined through the following two research questions:

RQ1 Is the company's choice to report non-GAAP profit figures influenced by specific firm characteristics?

RQ2 Is the company's choice to report non-GAAP profit figures influenced by specific events?

Drawing on agency theory, the first question will determine if the size of a company, ownership concentration, amount of leverage and good/bad news years influence a company's decision to report a non-GAAP profit figure. The second question will determine whether certain events influence the decision to report a non-GAAP profit figure, including, the introduction of IFRS, the GFC, the release of guidelines by AICD and FINSIA and the

release of Regulatory Guide 230 by ASIC. These research questions look at the choice to report or not to report a non-GAAP profit figure.

The study then focusses on the issue of opportunistic behaviour and the use of impression management tactics by companies that report non-GAAP profit figures. Company characteristics and specific events that might influence the use of impression management tactics to emphasise the non-GAAP profit figure compared to the GAAP profit figure are examined through the following research questions:

RQ3 Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific firm characteristics?

RQ4 Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific events?

Using the same firm characteristics as those investigated in Research Question 1, Research Question 3 will determine the particular characteristics that influence the use of impression management tactics to emphasise the non-GAAP profit compared to the GAAP profit. Research Question 4 will determine which of the events investigated in Research Question 2, influence the use of impression management tactics concerning emphasis of the non-GAAP profit compared to the GAAP profit. It is expected that the influence of some events such as the GFC will be reflected in an increase in the use of tactics to emphasise the non-GAAP figure compared to GAAP whereas other events such as the introduction of Regulatory Guide 230 by ASIC will act to mitigate the use of such tactics.

1.4 Contributions of the Study

This study aims to make several contributions to the literature concerning non-GAAP profit figures. It contributes to the growing literature on non-GAAP profits generally by studying the phenomenon over an extended timeframe and in an Australian context. Marques (2017) highlights the lack of Australian studies, particularly those covering the release of the ASIC Regulatory Guide, as a gap in the literature, and also calls for studies to investigate the effect of IFRS. This study addresses this gap by investigating the influence particular events such as the introduction of IFRS, the GFC and the introduction of the ASIC Regulatory Guide 230

have on the decision to report a non-GAAP profit. Previous studies have generally covered a period of between one and three years, with those including more than one year sometimes totalling the data from the years and not reporting each year separately (e.g. Allee et al. 2007; Bhattacharya et al. 2007; Guillamon-Saorin, Isidro & Marques 2017; Lougee & Marquardt 2004). This study will provide novel insights into the practice by not only looking at the sample as a whole, but also investigating each year separately and comparing the results for individual years in line with the events that were occurring at the time.

The study also contributes to the impression management literature, particularly the literature focusing on the use of impression management tactics when reporting non-GAAP profits. Investigating the use of impression management tactics in the voluntary disclosure of non-GAAP profit figures constitutes an important area of accounting research as the use of impression management tactics can mislead users of financial information and adverse capital allocations may result (Merkl-Davies & Brennan 2007). By using an Australian context, new insights will be provided into the use of impression management in an environment not constrained by regulation (unlike the US). There are a limited number of studies concerning non-GAAP profit figures in Australia with some only focussed on the incremental, value-relevant information perspective (e.g. Malone, Tarca & Wee 2016; Sinnewe, Harrison & Wijeweera 2017). The two studies that took an opportunistic behaviour perspective were Cameron, Percy and Stevenson-Clarke (2012), who looked at emphasis of the non-GAAP figure in the annual reports of 50 companies, and an experimental study by Johnson et al. (2014) where undergraduate accounting students were found to rely on non-GAAP rather than GAAP figures when analysing reports. This study answers the call of Cameron, Percy and Stevenson-Clarke (2012, p. 24) to use a larger sample in an Australian context and to investigate 'whether particular firm characteristics are associated with efficient versus opportunistic pro forma disclosures'.

The study will also provide valuable insights to shareholders, professional bodies and regulators. The results will apprise and educate shareholders and prospective investors about the practice of non-GAAP profit reporting in Australia. In particular, it will highlight how emphasis of particular figures could be misleading and constitute opportunistic behaviour on the part of companies. It will also inform professional bodies and ASIC, the corporate

regulator, about the effect of guidelines on the practice and help guide future developmental processes relating to the practice. One outcome of the study will be to determine whether the release of the ASIC Regulatory Guide 230 has been sufficient to change opportunistic behaviour or whether a tougher regulatory stance is needed. This could ultimately lead to an improvement in practice from both companies and ASIC to the benefit of shareholders and other stakeholders who rely on financial information.

1.5 Research Method

To investigate the reporting of non-GAAP profit figures by Australian companies, this study uses a population comprising the Standard & Poor's ASX 200 Index (based on market capitalisation). The data set spans twelve years from 2004 to 2015 in order to capture the influence of various events including the introduction of IFRS, the GFC and the release of the ASIC Regulatory Guide 230.

This study uses both qualitative and quantitative methods to analyse the research questions and employs content analysis of annual results press releases and annual reports in order to determine the extent of disclosure and emphasis given to both the GAAP and non-GAAP profit figures. Impression management tactics concerning emphasis are measured through a comprehensive impression management index developed for this study and adapted from Bowen, Davis and Matsumoto (2005), Hitz (2010) and Marques (2010). Instances of both non-GAAP and GAAP profit figures are coded for emphasis, looking at both location of disclosure and repetition, and a relative emphasis score is calculated. Quantitative analysis, including logistic and multiple regression techniques, is then undertaken to explore each of the four research questions.

1.6 Findings

The study found that the reporting of non-GAAP profit figures by Australian companies has increased steadily over the twelve-year period, with 79% of companies in the sample reporting such a figure in the final year of the study. The majority of companies in the study reported a non-GAAP profit figure higher than the GAAP profit in all but two years of the

study. Larger companies and those that were more highly leveraged were significantly more likely to report non-GAAP profit figures for most years of the study. Reporting bad news in the form of a decrease in GAAP profits or a GAAP loss was also a statistically significant factor influencing the decision to report a non-GAAP profit in several years. The GFC was the only specific event that had a statistically significant effect on the decision to report a non-GAAP profit figure.

Focussing on the use of impression management tactics, results showed that more highly leveraged companies and those reporting bad news were more likely to use tactics to emphasise the non-GAAP profit figure over the GAAP profit figure. These results were statistically significantly for the total sample and for some individual years of the study. When investigating the specific events over the twelve year period, the GFC and the introduction of the ASIC Regulatory Guide 230 significantly influenced the use of impression management tactics to highlight the non-GAAP profit figure compared to the GAAP profit figure. The GFC saw an increase in the emphasis towards the non-GAAP figure and the release of the ASIC Regulatory Guide prompted a change in emphasis towards the GAAP figure. The results also highlight issues with companies failing to provide a clear reconciliation between the non-GAAP and GAAP profit figures, a requirement of both the AICD and FINSIA guidelines and the ASIC Regulatory Guide.

The results highlight the various practices of Australian companies with regard to the reporting of non-GAAP profit figures. This is important for shareholders and potential investors when making investment decisions and also for other stakeholders such as ASIC who monitor and regulate the practices of listed companies. The results also highlight the need for ASIC to remain vigilant in its pursuit of both informing companies of regulations and enforcing Regulatory Guides so that potential opportunistic behaviour on the part of companies can be monitored and addressed.

1.7 Structure of the Thesis

This thesis consists of nine chapters and is organised as follows:

Chapter 1 introduces the study by providing a background to the research. The research questions investigated in the study are briefly discussed along with the contributions the study makes to the literature and practice. The research methods adopted in the study and a brief description of the findings are also provided.

Chapter 2 provides a review of prior literature concerning voluntary disclosure in general, and the disclosure of non-GAAP profit figures in particular. The phenomenon of reporting non-GAAP profits is discussed drawing on the two motives that have been postulated in extant literature for the practice. The chapter reports on the incremental information motive and the opportunistic motive, including a detailed discussion of impression management. This chapter also reviews literature concerning the reaction of investors to non-GAAP profit disclosure and the effect regulation has had on the practice in countries other than Australia.

Chapter 3 reports on the regulatory environment in Australia and discusses how particular law and accounting standards affect the practice of disclosing non-GAAP profits. The guidelines released by AICD and FINSIA and the Regulatory Guide released by the ASIC are reviewed in detail. Previous industry reports into the practice are also discussed.

Chapter 4 explores a theoretical framework for the study and develops a conceptual model based on agency theory. From this conceptual model, four research questions and sixteen related hypotheses are developed to investigate the reporting of non-GAAP profits in Australia and the use of impression management tactics by companies reporting these figures.

Chapter 5 presents the research methods employed in the study. It explains the four phases of data collection and describes the statistical tests used during the analysis. The development of an impression management index for emphasis through location and repetition is explained along with a detailed set of coding rules and procedures.

Chapters 6 and 7 report the results for the study. General results relating to the practice of reporting non-GAAP profits in Australia are presented along with descriptive statistics for the

sample. Chapter 6 reports on the results for Research Questions 1 and 2 concerning the company characteristics and events that influence the decision to report a non-GAAP profit and Chapter 7 reports the results for Research Questions 3 and 4 regarding the use of impression management tactics when reporting these profit figures.

Chapter 8 provides an in-depth discussion of these results and relates the findings to those of previous studies and to agency theory.

Chapter 9 concludes the study and summarises its contributions and implications. Limitations of the study are discussed along with suggested directions and opportunities for future study.

1.8 Summary

This chapter introduced the topic of this study and outlined the background and the research questions to be investigated. Recognising the limited amount of longitudinal research, and research in an Australian context, concerning non-GAAP profit figures, the contributions the study will make to both literature and practice were discussed. The methods to be employed to investigate the research questions were outlined along with a brief discussion of the key findings. The structure of the thesis was then provided. In the next chapter, a literature review concerning the voluntary reporting of non-GAAP profit figures is undertaken.

Chapter 2

Literature Review: Voluntary Reporting of Non-GAAP Profit Figures

2.1 Introduction

The reporting of non-GAAP profits has been prevalent over the previous two decades in many countries. Two contrasting motives for this practice have been postulated by extant literature: either management is endeavouring to overcome information asymmetry by providing incremental, value-relevant information or it is behaving opportunistically and attempting to mislead investors and other stakeholders. These two motives have often been presented as mutually exclusive (Merkl-Davies & Brennan 2007) but some researchers have questioned whether the motives can indeed coexist (e.g. Entwistle, Feltham & Mbagwu 2006b; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Libby & Emett 2014; Young 2014). Previous literature concerning voluntary disclosure, and in particular the disclosure of non-GAAP earnings, is explored in this chapter.

A general overview of voluntary disclosure is provided in Section 2.2, with Section 2.3 specifically discussing non-GAAP profits. The two possible motives postulated for the disclosure of non-GAAP profits are then examined, with Section 2.4 presenting the incremental information perspective and Section 2.5 presenting the opportunistic behaviour perspective. Studies concerning the reactions of investors to the disclosure of non-GAAP figures are discussed in Section 2.6. The effect of regulation on the practice of reporting these figures is explored in Section 2.7 and the chapter concludes with a summary in Section 2.8.

2.2 Voluntary Disclosure

The reporting of non-GAAP profit figures is a form of voluntary disclosure, with companies choosing whether to calculate such a figure, and where and how to report it. This section provides a general background on the practice of voluntary disclosure by companies (it does not relate specifically to non-GAAP profit reporting). Literature concerning the voluntary disclosure of non-GAAP profit figures specifically will be discussed from Section 2.3

onward. Voluntary disclosures are discretionary disclosures of information made by companies in excess of information required by law or regulations (Lev 1992; Meek, Roberts & Gray 1995). These disclosures represent free choice on the part of the management to 'provide accounting and other information deemed relevant to the decision needs of users' (Meek, Roberts & Gray 1995, p. 555). Voluntary disclosures may cover a range of different quantitative and qualitative information including strategic information such as corporate characteristics, strategy and future prospects; financial information such as various non-GAAP profit measures (the topic of this study) and non-financial information such as information about directors, employees and social and environmental disclosures. The disclosures may be retrospective or prospective and can be made through a variety of communication tools including the annual report, press releases and websites.

2.2.1 Motives for Voluntary Disclosure

Voluntary disclosures can be used for strategic purposes and motives for disclosure practices provide interesting empirical questions (Healy & Palepu 2001) which have been approached from a range of theoretical perspectives depending on the type of disclosure (Williams 2008). Studies have variously used agency theory, legitimacy theory, stakeholder theory and signalling theory, amongst others, in an attempt to explain possible motives for voluntary disclosure (An, Davey & Eggleton 2011). The theories differ in the type of disclosures they attempt to explain, the presumed audience for the disclosures and the incentives for the disclosures (Brennan & Merkl-Davies 2013; Cotter, Lokman & Najah 2011). These theories will be explained in more detail in Chapter 4 of this thesis.

As far as financial disclosures (such as the reporting of non-GAAP profit figures) are concerned, extant literature has often used an agency theory perspective to argue that the demand for extra information provided by voluntary disclosure arises due to information asymmetry between management and shareholders of the company (or outsiders, e.g. prospective investors) (Healy & Palepu 1993, 2001; Lev 1992). This perspective assumes that managers have superior information to shareholders and prospective investors and that these shareholders and investors demand information to assist in valuing firms and making investment decisions (Healy & Palepu 2001). Management may have extra incentive to reduce information asymmetry at certain times, for example, when planning to make a public

equity offering. Various studies have found that firms planning to issue equity increased their disclosure activity prior to the offering (Gibbins, Richardson & Waterhouse 1990; Heitzman, Wasley & Zimmerman 2010; Lang & Lundholm 1993, 2000). Lang and Lundholm (2000, p. 627) found that firms dramatically increased disclosure in the six months leading up to an equity issue and that results were strongest for discretionary disclosure 'suggesting that the disclosure changes reflect conscious decisions by managers'.

Other factors may also be at play in the decision to participate in voluntary disclosure. Gibbins, Richardson and Waterhouse (1990) conducted interviews with both internal management and external consultants using grounded theory to develop an empirically derived structure in an attempt to explain and predict corporate financial disclosures. They identified two disclosure positions which motivate managers and may exist within the same firm, ritualism and opportunism. Under the ritualism dimension, managers disclose information in accordance with the norms, rules, standards and procedures of the organisation. The disclosure process in this dimension is repetitive and largely passive. In contrast, under the opportunism dimension managers actively seek to gain a firm-specific advantage through specific disclosure strategies. This would include the increase in financial disclosures of various types leading up to an equity offering as discussed above. Voluntary disclosure is likely to have an impact on the strategic decision making of those both inside and external to the organisation and on the company's competitiveness (Williams 2008). Therefore, any disclosure decision needs to be informed by the possible benefits and costs associated with voluntary disclosure.

2.2.2 Benefits of Voluntary Disclosure

Voluntary disclosure practices have been associated with certain benefits for companies. Globalisation has meant increased competition for capital, and long-term investors are likely to attempt to reduce risk and uncertainty by focusing on companies with higher levels of disclosure (Schuster & O'Connell 2006). Several studies assert that voluntary disclosure leads to improvements in stock liquidity (usually indicated by a reduction in the bid-ask spread) and in turn reductions in the cost of equity capital through increased demand for the firm's securities and reduced transaction costs (e.g. Amihud & Mendelson 2000; Botosan 2006; Diamond & Verrecchia 1991; Healy, Hutton & Palepu 1999; Lakhal 2008). Some of

these studies are based on models developed by the authors and not on empirical evidence as such (e.g. Beyer & Guttman 2012; Diamond & Verrecchia 1991). Others have attempted to show relationships between increased disclosure, lower cost of capital and improved stock liquidity using empirical data (e.g. Botosan 1997; Botosan & Plumlee 2002; Healy, Hutton & Palepu 1999; Lakhal 2008; Leuz & Verrecchia 2000; Petersen & Plenborg 2006). Indeed, the results of studies that show how management increases the level of voluntary disclosure leading up to equity offerings suggest that management themselves behave as if greater disclosure reduces the cost of equity capital (Botosan 2006). There is some evidence that increased disclosure may also lower the effective interest cost of debt, the argument being that timely and detailed disclosure reduces lenders' and underwriters' perceptions of default risk (Sengupta 1998).

The effect of analyst following has been used as an extra explanatory variable in some research. Botosan (1997) conducted an empirical study using annual reports of manufacturing firms and found that greater disclosure is associated with a lower cost of equity capital for firms with low analyst following only. The findings were not significant for firms with high analyst following and Botosan explained this may be due to the of annual reports as the only disclosure measure in the study (she surmised that annual reports are a weaker proxy for overall disclosure where analysts play a substantial role in communicating company performance). A Canadian study by Richardson and Welker (2001) supported this finding of a negative relationship between financial disclosure and cost of capital for firms with low analyst following only.

Another benefit of disclosure explored in extant literature is the effect it has on analyst following itself and studies have combined this with the cost of equity capital investigations (Healy, Hutton & Palepu 1999; Lang & Lundholm 1996). Analysts are an important part of the capital market and provide earnings forecasts, buy/sell recommendations and other information to interested parties including investors and brokers. Studies show that increased disclosure leads to growth in analyst following (Healy, Hutton & Palepu 1999; Lang & Lundholm 1996), more accurate analyst earnings forecasts, less dispersion among individual analyst forecasts and less volatility in forecast revisions (Lang & Lundholm 1996).

2.2.3 Costs of Voluntary Disclosure

As well as the benefits discussed above, there are costs involved in disclosure. These costs may be both direct and indirect (Lev 1992). Direct costs include collection, production/processing, distribution and in some cases auditing of the information to be disclosed (Lev 1992; Meek, Roberts & Gray 1995; Verrecchia 1983). These costs may increase with firm size as larger companies tend to produce more information, however the fixed cost component of information production means the cost may be proportionally greater for smaller firms (Amihud & Mendelson 2000).

Indirect costs or proprietary costs can be harder to measure and involve parties external to the organisation. They relate to the impact the disclosures have on the company's activities and competitive position due to additional information being revealed to competitors (Healy & Palepu 1993; Schuster & O'Connell 2006). Those outside the organisation may receive and use data to their advantage (Healy & Palepu 2001; Verrecchia 1983) or information may be revealed that potentially damages the firm by resulting in increased competition or government regulation (Meek, Roberts & Gray 1995). Managers will therefore only disclose competitive information when the expected increase in firm value exceeds the cost of disclosure (Verrecchia 1983). There is also a possibility that the disclosure of certain information, particularly earnings forecasts, may expose the company to litigation (Amihud & Mendelson 2000; Petersen & Plenborg 2006; Schuster & O'Connell 2006). It has also been suggested that potential conflicts of interest between managers and shareholders may mean some disclosures may not be viewed as credible by shareholders (Healy, Hutton & Palepu 1999). Therefore, the decision to provide voluntary disclosures, and the type and extent of those disclosures, involve consideration of whether the benefits exceed the direct and indirect costs involved (Meek, Roberts & Gray 1995).

2.2.4 Characteristics of Disclosing Firms

Apart from the motives discussed above, companies with certain characteristics may be potentially more likely to voluntarily disclose information. Studies from a wide range of countries have investigated the association between levels of voluntary disclosure and firm characteristics. These studies have typically developed some type of disclosure index to

measure the quantity and/or quality of disclosure and have most commonly used the annual report as the medium for the disclosure.

Previous studies have overwhelmingly found that the size of a company is significantly, positively related to the amount of voluntary disclosure in the annual report (Ahmed & Courtis 1999; Boesso & Kumar 2007; Chow & Wong-Boren 1987; Hossain, Perera & Rahman 1995; Lang & Lundholm 1993; Meek, Roberts & Gray 1995). Various reasons have been proposed for this finding. Agency theory suggests larger firms, with a greater proportion of outside capital, have greater agency costs and information asymmetry (Jensen & Meckling 1976). They are also likely to be more complex and have a wider ownership base than small firms (Meek, Roberts & Gray 1995). More disclosure is therefore required to mitigate information asymmetry and inform investors. Larger firms are also better able to bear the direct costs of voluntary disclosure and are therefore more likely to disclose more information than smaller firms (Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995).

Industry type has also been hypothesised as an influencing factor on disclosure levels due to differing levels of proprietary costs across various industries. The results for the influence of industry have been mixed. Meek, Roberts and Gray (1995) found that companies in the metals, building and construction industry as well as the oil, chemicals and mining industry made significantly more voluntary disclosure of financial information with the latter industry also disclosing significantly more non-financial information particularly social and environmental. They suggest industry patterns may exist, where companies mimic what their competitors in the same industry are doing with regards to disclosure. Another study using data from the US and Italy found that evidence for industry was generally weak but was significant for the utilities industries in the US and Italy and for the clothing industry in Italy (Boesso & Kumar 2007).

The effect of leverage on quantity of disclosure has often been included in studies, again with mixed results ranging from significant (Ahmed & Courtis 1999), marginally significant (Hossain, Perera & Rahman 1995), not significant (Chow & Wong-Boren 1987) to significant but not in the predicted direction (less leveraged firms disclosed more while it was predicted

that highly leveraged firms would have higher disclosure) (Meek, Roberts & Gray 1995). In relation to the effect leverage has on the disclosure of earnings figures in particular, Wong and Wong (2010) looked at the voluntary disclosure of Earnings Before Interest and Taxation (EBIT) in New Zealand firms and found that firms that were highly leveraged were more likely to voluntarily disclose EBIT in the financial statements.

Other characteristics that have been found to have no significant association with increased disclosure include profitability (Ahmed & Courtis 1999; Meek, Roberts & Gray 1995), assets-in-place (Chow & Wong-Boren 1987; Hossain, Perera & Rahman 1995) and type of auditor/audit firm size (Ahmed & Courtis 1999; Hossain, Perera & Rahman 1995). In a study based in Hong Kong and Singapore, countries with traditional Chinese influences and a large degree of concentrated, family ownership, Chau and Gray (2002) found a significant, positive relationship between dispersed ownership and more disclosure and a negative, significant relationship between family ownership and disclosure.

The sometimes conflicting results of these studies should be considered in light of their methodology. The studies discussed in this section have all used annual reports as the medium to investigate disclosure practices. However, voluntary disclosures may be provided in a range of mediums including much more timely vehicles than annual reports such as earning press releases and websites. Firms choosing to convey good financial news, for example, may use one of these other mediums. The conflicting results between studies for certain characteristics (e.g. leverage) may be explained by the wide range of different disclosures included in the study, disclosure index construction, differences in measures used for explanatory variables and differences in research settings. The next section narrows the discussion of voluntary disclosure to the topic of this study - the voluntary disclosure of non-GAAP profit figures.

2.3 Voluntary Disclosure of Non-GAAP Profit Figures

In Australia, as in the US and many other countries, the reporting of non-GAAP profit figures and other non-GAAP financial information is voluntary. Management and other preparers of disclosure documents have discretion (particularly outside the financial statements) as to

what figures to report and how to report them. Importantly these non-GAAP profit figures are usually unaudited. Various terms are used for these figures in disclosure documents. In Australia the most commonly used terms include 'underlying profit', 'normalised profit', 'cash earnings' and 'EBITDA/EBIT' (KPMG 2010b). Studies conducted in the US generally concern the reporting of alternative profit figures collectively termed 'pro forma' profits, a figure which differs from GAAP and is a 'flexible and unaudited measure of firm performance' (Entwistle, Feltham & Mbagwu 2006b, p. 355). In the early to mid-1990s, the term 'pro forma' was used in the US to describe earnings figures that represented 'as if' results, that is, the results if a proposed merger or takeover had taken place (Brody & McDonald 2004; Heitger & Ballou 2003; James & Michello 2003). The use of these figures was then expanded with companies using the term to describe profits calculated excluding unusual, non-cash and transitory or one-off expenses. In the US these earnings have many labels and are variously described as, for example, 'core', 'adjusted', 'recurring' and 'ongoing' earnings (Entwistle, Feltham & Mbagwu 2004). In Australia, the term 'pro forma' usually refers to non-GAAP financial information appearing in transaction documents such as the prospectus and takeover documents. It is designed to show the effects of proposed or completed transactions for illustrative purposes (Australian Securities and Investments Commission 2011). For the purpose of this thesis, the term 'non-GAAP' will be used as a collective noun for profits calculated other than in accordance with IFRS.

Industry studies have shown that the practice of reporting such figures is prevalent in Australia and arguments have been postulated in extant literature for and against the practice (industry studies are discussed in more detail in Section 3.4). Those arguing in favour of the practice maintain that the resulting figures better represent the underlying, core or operating earnings of a company which are more likely to persist in the future (Black et al. 2012). It has been argued that these non-GAAP profit figures are more informative numbers which enable analysts and shareholders to better evaluate a company's performance (Entwistle, Feltham & Mbagwu 2004). It has also been suggested that excluding one-time items actually enables better comparisons between companies, particularly in developing industries (Heitger & Ballou 2003). However, in the past, concerns regarding the use of these alternative profit figures have been raised due to a lack of transparency, definition or consistent format for the figures (making comparison between companies difficult) plus a lack of any rules governing

their use (Brody & McDonald 2004; Halsey & Soybel 2002; Heitger & Ballou 2003). The reported figures are both company-specific and time-specific (Bryan & Lilien 2004; Sek & Taylor 2011) with some suggesting that companies can report earnings 'any way they want' (Brody & McDonald 2004, p. 37). These concerns prompted a response from regulators in the US with the Securities and Exchange Commission (SEC) issuing Regulation G in 2003 to control the way such figures are reported and to require non-GAAP figures to be reconciled to GAAP. In Australia, ASIC issued Regulatory Guide 230: *Disclosing non-IFRS financial information* (ASIC 2011), in December 2011 (discussed in Section 3.3.2).

To understand this phenomenon of reporting non-GAAP profit figures it is important to consider how these figures are calculated. Studies have shown that the majority of firms that report such a figure calculate an amount higher than the GAAP profit or loss for the period (Entwistle, Feltham & Mbagwu 2004; James & Michello 2003; KPMG 2010b). The question arises as to what is excluded from the GAAP profit to arrive at the non-GAAP profit figure and how 'informative' is this excluded information for investors and other stakeholders?

2.3.1 Items Excluded from Non-GAAP Profit Figures

Guidelines released in Australia in 2009 by the AICD and FINSIA (AICD & FINSIA 2009) (discussed in detail in Section 3.3.1) list suggested items which may be excluded from GAAP profit to arrive at a non-GAAP profit figure. These suggestions include: significant one-off transactions; one-off provisions such as costs of redundancies; fair value adjustments from revaluing assets; impairment losses; income tax settlements from previous years; defined benefit pension plans that need a 'top up' and revaluation of long-term liabilities. The guidelines suggest that certain items should not be included in the adjustments such as employee share schemes, depreciation and amortisation.

What Australian companies have actually been including and excluding in their non-GAAP profit figures, and the persistence of and relevance to users of these excluded items, has to date received little attention in academic studies. Two exceptions are studies by Sek and Taylor (2011) and Malone, Tarca and Wee (2016). Sek and Taylor (2011) provided descriptive evidence on the items excluded from non-GAAP profits by the top four Australian banks, listing fair value adjustments, goodwill amortisation, adjustments for

gains/losses on asset sales and distributions from other equity instruments as the most common. Malone, Tarca and Wee (2016) investigated adjustments made to non-GAAP figures for fair value remeasurements and asset impairments. Industry studies have attempted to determine the most common adjustments made by companies. In 2009, for example, common adjustments made by Australian companies included: impairment/revaluation of assets including goodwill; purchase/disposals of assets and businesses; restructuring and redundancy costs and 'one-off' tax items (Deloitte 2010; KPMG 2010b). Potential problems arise because management chooses which items to include and exclude; different companies may choose different items. Even within one company the exclusions may vary from one period to the next which makes comparisons between companies, or within one company but between periods, very difficult.

Studies in the US have generally found that the type of items excluded from the calculation of these alternative profit figures are non-recurring, extraordinary or 'non-persistent' expenses, some non-cash expenses and in some cases non-recurring or extraordinary income (Doyle, Lundholm & Soliman 2003; Halsey & Soybel 2002). Doyle, Lundholm and Soliman (2003, p. 145) describe the example of the fourth quarter, 2001 earnings press release of AT&T which excluded from its non-GAAP earnings restructuring charges, asset impairment charges, losses on the sale of businesses and assets, goodwill amortisation and losses on equity method investments. By excluding these items, income was boosted from a loss of 0.39 cents per share under GAAP to a profit of 0.5 cents per share. Halsey and Soybel (2002) refer to the management discussion and analysis of Enron's 2000 annual report. The report discloses 'after tax results before items impacting comparability'. The figure excludes asset write-downs, one-time gains and the 'cumulative effect of accounting changes' (Enron Corporation 2000, p. 21). Whilst some argue that sustainable or recurring earnings form the basis for forecasting future earnings and therefore assist in firm valuation (Entwistle, Feltham & Mbagwu 2010), the terminology used by companies varies greatly, as does the items included or excluded. This may cause confusion to investors and, as argued above, difficulty in comparing results.

The motivation for disclosing non-GAAP profit information has been explained using two contrasting perspectives. Extant literature argues that preparers may be attempting to provide

value-relevant information incremental to that provided by the financial report and aimed at improving stakeholder decision making. Alternatively, the motive may be opportunistic and may constitute impression management. Merkl-Davies and Brennan (2007, p. 117) state that these contrasting perspectives form 'two competing schools of thought' thus implying they are mutually exclusive. However, others argue that the two theories are not necessarily mutually exclusive and may overlap if managers deliberately or inadvertently select and present incremental value-relevant information for impression management purposes, that is in a misleading manner (Entwistle, Feltham & Mbagwu 2006b; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Libby & Emett 2014; Young 2014). As Young (2014, p. 451) proposes, 'informative reporting and strategic disclosure do not represent mutually exclusive explanations' for non-GAAP reporting behaviour. He proposes that it is likely both motives co-exist with particular motivations and reporting incentives varying depending on time and the firms involved. This current study adopts the position that the two motives may coexist and not be mutually exclusive. The next two sections will discuss these two motives.

2.4 Incremental Information Motive

The first perspective argues that the discretionary disclosure choices made by managers constitute incremental information aimed at improving the decision making of various stakeholders (Merkl-Davies & Brennan 2007). A consistent argument for the rise in the reporting of non-GAAP profit figures worldwide is the demand for more value-relevant information, especially where the value relevance of GAAP earnings is low (Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2010; Lougee & Marquardt 2004).

2.4.1 Definition and Background

Value relevance studies investigate how accounting variables are associated with the market value of equity (Barth 2000; Beaver 2002; Ohlson 1995) and therefore reflect the fundamental value of the firm (Fung, Su & Zhu 2010). Accounting amounts are considered value relevant if they have 'a predicted association with equity market values' (Barth, Beaver & Landsman 2001, p. 79), that is, if they relate to value in the predicted manner. This valuation approach has been used in many studies addressing financial reporting and

accounting standard setting (Barth 2000; Holthausen & Watts 2001). Proponents of this type of research argue that it essentially concerns the qualitative characteristics of relevance and reliability of various accounting measures (Gaffikin 2008).

Value relevance studies require an underlying measure of value and a valuation model. Share prices are one of the most common measures used in this area of research as, even if markets are not totally efficient, they 'reflect the consensus belief of investors' (Barth 2000, p. 11). Many studies use an earnings or dividend discount model based on seminal works by Miller and Modigliani (1966), Beaver (1968) and Ball and Brown (1968). This model links share price to accounting amounts by regressing stock returns on alternative measures of earnings. The performance measure resulting in the regression with the highest R^2 is considered the best or most value relevant (Holthausen & Watts 2001). This model has been criticised for its reliance on accounting numbers to construct the valuation model (Beaver 2002; Holthausen & Watts 2001). For example, some items affect retained earnings but are not included in the income statement and this creates a 'dirty surplus' as opposed to the situation where all changes in retained earnings are reflected in the income statement, a 'clean surplus'.

Another model, based on the balance sheet, assumes the market value of equity is equal to the market value of assets less the market value of liabilities with the market values of the assets and liabilities being the present value of the expected dividends or cash flows associated with the underlying rights and obligations (Barth 2000). A criticism of this model is that accounting assets and liabilities do not reflect all the assets and liabilities of the firm, for example some intangibles are not included in the balance sheet (Barth & Landsman 1995) and therefore the model may need to include additional variables.

The Ohlson and Feltham Model (Feltham & Ohlson 1995; Ohlson 1995, 1999) provides a direct link between accounting amounts and firm value and has been described as 'perhaps the most pervasive valuation model in accounting research today' (Barth 2000, p. 13) The underlying assumption of the model is the 'clean surplus' and it specifies how to estimate firm value from accounting amounts rather than relying on market prices (Barth 2000). One criticism of the model is that it assumes a non-strategic setting where there is no information asymmetry and no assumed strategic use of accounting data (Beaver 2002). This is a concern

as many financial reporting issues, including the reporting of non-GAAP profit figures, arise from concerns about information asymmetry and management incentives to exploit such asymmetry to their advantage.

2.4.2 Incremental Information and Non-GAAP Profit Figures

It is argued that non-GAAP profit figures are needed to help shareholders and investors make informed decisions, with managers maintaining that the reporting of such figures provides incremental information in addition to the information already available to shareholders and investors (Black et al. 2012; Entwistle, Feltham & Mbagwu 2004; Heitger & Ballou 2003). Incremental information studies usually view one or more accounting measures as given (GAAP profit) and assess the incremental contribution and value relevance of another measure (Biddle, Seow & Siegel 1995). Some studies have used models such as those developed by Ohlson and Miller and Modigliani to measure value relevance of the various earnings figures. Entwistle, Feltham and Mbagwu (2010) found that non-GAAP earnings, GAAP earnings and Broker's Estimate earnings (analyst-adjusted GAAP earnings metrics) are all value relevant but non-GAAP earnings are significantly more value relevant than the other figures. Brown and Sivakumar (2003) used a variety of tests and concluded that non-GAAP earnings reported by managers and analysts are more value relevant than GAAP.

Brown and Sivakumar (2003) and Lougee and Marquardt (2004) explored the predictive ability of the different measures in an attempt to assess how well past values of an earnings figure predict future values of the measure. Brown and Sivakumar (2003) assumed an efficient market and concluded that non-GAAP measures provided significantly more accurate predictions than GAAP measures. Lougee and Marquardt (2004) obtained mixed results on predictive ability and questioned whether the reaction of investors is market efficiency or mispricing. Cornell and Landsman (2003) argued that tests used in predictive studies are significantly biased against GAAP earnings due to the presence of one-time or non-persistent figures. Indeed, the comparability of earnings measures depends on the extent to which the measure effectively captures persistent components of earnings (Cornell & Landsman 2003). Some argue that non-GAAP figures are therefore more informative and are value relevant as they show sustainable earnings as opposed to GAAP which may contain non-persistent, one-off figures (Bhattacharya et al. 2003).

Others have used event studies, regressing abnormal returns and earnings surprises to determine if the release of the particular non-GAAP profit figure is associated with price reactions. These studies usually examine share price reactions over short windows of time around the date when the earnings figures are disclosed (Beaver 2002; Brown & Warner 1980, 1985) and associations between the release of the figure and price reactions may be considered evidence of value relevance (Holthausen & Watts 2001). Non-GAAP figures have been found to be more useful to investors when the informativeness of GAAP is low (Lougee & Marquardt 2004), with market participants perceiving them to be more representative of core earnings (Bhattacharya et al. 2003). Using long window returns, Bradshaw and Sloan (2002) conclude that the value relevance of non-GAAP earnings has increased significantly over time with investors showing an increased preference for such earnings figures. Table 2.1 presents a summary of studies concerning the reporting of non-GAAP earnings information and value relevance.

As explained above, the reporting of non-GAAP profit figures is a form of voluntary disclosure in most countries. However, South Africa provides an interesting setting to investigate the value relevance of GAAP and non-GAAP earnings, as the reporting of a non-GAAP figure is mandatory. The figure is audited, and its calculation is defined in great detail, thereby making it comparable. Venter, Emanuel and Cahan (2014) investigated South African companies using data from 2002-09 and found that non-GAAP is relatively more value relevant than GAAP particularly when exclusions are large.

There are several limitations to the empirical studies discussed in this section. Firstly, non-GAAP figures are not 'unambiguously defined' with different companies calculating the figure in different ways (Cornell & Landsman 2003, p. 20). This gives rise to the issue where studies using non-GAAP figures and comparing them to GAAP figures are not comparing the same measure for all the companies in the study. This issue may have influenced the decision of some researchers to use other data as a proxy for the non-GAAP figures reported by

Table 2.1: Summary of studies concerning non-GAAP earnings information and value relevance

Author/Year	Objective/Sample/Model Used	Findings
Bradshaw and Sloan (2002)	To investigate the use of non-GAAP earnings figures and the market response to these figures. Uses earnings per share (EPS) from US Institutional Brokers Estimate System (I/B/E/S) data and press releases from 1985-97. Event study using long window returns and time series analysis of forecast errors.	Investors show an increasing preference for non-GAAP earnings. The value relevance of non-GAAP earnings has increased significantly over time.
Bhattacharya et al. (2003)	To assess the relative informativeness and persistence of non-GAAP earnings reported by managers relative to GAAP and I/B/E/S. Uses EPS from US non-GAAP press releases from 1998-2000. Event study regressing short-window abnormal returns and earning surprise measures.	Non-GAAP significantly more informative than GAAP and appear more permanent than GAAP. Market participants perceive them to be more representative of core earnings.
Brown and Sivakumar (2003)	To determine if non-GAAP earnings reported by managers and analysts are more value relevant than those derived from firms' financial statements. Uses EPS from US I/B/E/S data and EPS from operations from 10-K and 10-Q filings from 1989-97. Uses predictive ability, association with share prices and correlation of earning surprises with share returns to measure value relevance.	Using all three methods, non-GAAP income reported by managers and analysts is more value relevant than the one derived from financial statements by S&P Compustat. (the study assumes efficient markets – if not efficient investors may focus too much on non-GAAP earnings reported by managers and analysts.)
Lougee and Marquardt (2004)	To investigate investor response to non-GAAP earnings and whether this response is consistent with market efficiency or mispricing. Uses US press releases from 1997-99. Event study regressing abnormal stock returns on earnings measures.	Investors find non-GAAP more useful when GAAP informativeness is low and strategic considerations (attempting to meet or beat a benchmark) are absent. Results for tests of predictive ability of non-GAAP are mixed and therefore it is unclear whether the reaction of investors is due to market efficiency or mispricing.
Entwistle, Feltham and Mbagwu (2010)	To explore whether non-GAAP, I/B/E/S and GAAP are value relevant and which has the greatest value relevance. Uses US press releases from 2000-2004, a timeframe which straddles the introduction of regulation. Uses permanent earnings model (Miller & Modigliani 1966) and accounting-based valuation model (Ohlson 1995)	Non-GAAP, GAAP and I/B/E/S earnings are all value relevant with non-GAAP being significantly more value relevant than I/B/E/S which are more value relevant than GAAP.
Venter, Emanuel and Cahan (2014)	To investigate the value relevance of GAAP and non-GAAP earnings in a setting where the reporting of non-GAAP earnings is mandatory, and the calculation of the figure is defined in detail and subject to audit. Uses accounting-based valuation model (Ohlson 1995) and data from South African firms from 2002-09.	Non-GAAP value relevant and exclusions from GAAP value irrelevant. Non-GAAP has relatively higher value relevance than GAAP particularly where exclusions are large.

companies themselves, see Section 2.4.3 for a discussion on this phenomenon. Secondly, some previous studies only include companies that have disclosed a non-GAAP figure (e.g. Bhattacharya et al. 2003; Bhattacharya et al. 2004). This does not allow any comparison with firms that disclose only GAAP earnings and the results do not provide any indication of

whether analysts and investors would have arrived at the same conclusions and decisions by adjusting GAAP earnings.

2.4.3 The Use of Analyst Tracking Services Data

An important consideration when interpreting particular studies from the US (e.g. Bradshaw & Sloan 2002; Brown & Sivakumar 2003; Doyle, Lundholm & Soliman 2003; Heflin & Hsu 2008; Kolev, Marquardt & McVay 2008) is the use of data from American analyst tracking services such as Zacks, First Call and particularly Institutional Brokers Estimate System (I/B/E/S) as a proxy for non-GAAP earnings figures released by the firms themselves. These figures (often called 'street' earnings) are analyst-adjusted GAAP earnings metrics. Studies on non-GAAP earnings often choose to use tracking services' figures as a proxy for the non-GAAP figures management themselves report, as the tracking service provides a 'readily accessible large sample of observations' (Easton 2003, p. 180). Although the figures reported by these tracking services are analyst adjusted, it is proposed that management can in fact influence and 'guide' the figures as they are based on 'operating earnings' reported to the services by the companies involved and then adjusted by the analysts (Bradshaw & Sloan 2002). It is important when considering the results of previous studies to note whether the data was acquired from an analyst tracking service or from actual documents such as quarterly press releases.

While studies using these figures can provide some evidence on the value relevance and investor perceptions of alternative, non-GAAP earnings figures, the results do not apply to actual figures reported by managers of companies. The use of I/B/E/S or other analyst tracking services therefore has several limitations when exploring the motivations for and reporting of non-GAAP earnings. Most importantly firms included in the tracking services become de facto reporters of non-GAAP figures even if they do not actually choose to report this type of figure in their press releases or other disclosure documents. This could lead to invalid inferences being drawn (Bhattacharya et al. 2003; Lougee & Marquardt 2004). Secondly, there may be a significant difference between the non-GAAP figure reported in firms' press releases and the tracking service figure. In their study involving non-GAAP press releases from 1998-2000, Bhattacharya et al. (2003) found the average I/B/E/S earnings per share was 0.047 whereas the average non-GAAP figure reported by firms in their press

releases was 0.085. Thirdly, the use of tracking services figures makes it difficult to draw inferences about managerial motivations for non-GAAP reporting because the use and reporting of such a figure by management is not actually investigated (Black et al. 2012). The fact that managers may make further adjustments beyond those made by analyst tracking services suggests an opportunistic motive on the part of management (Black & Christensen 2009). The next section discusses the opportunistic motive and the use of impression management tactics when reporting non-GAAP figures.

2.5 Opportunistic Motive

2.5.1 Impression Management

Management in the corporate sector can use the voluntary, narrative sections of annual reports and other documents to present certain information in more detail and provide explanations that should increase its decision usefulness. However, the inclusion of this voluntary information also presents an opportunity for managers to exploit information asymmetry and to engage in opportunistic behaviour concerning disclosure choices. This is facilitated by the fact that corporate narratives are largely unregulated (Merkl-Davies & Brennan 2007). It is argued that some shareholders and potential investors may be unable to assess managerial bias in the short term and may be misled concerning the underlying economic performance of the firm which may in turn result in potential adverse capital allocations (Merkl-Davies & Brennan 2007). One form of opportunistic behaviour concerning the way information is presented by managers involves the use of impression management.

Impression management has its origins in social psychology and is ‘concerned with studying how individuals present themselves to others in order to be perceived favourably by others’ (Hooghiemstra 2000, p. 60). Indeed, it has been stated that impression management is ‘organised communication, which is controlled and managed, influential and persuasive’ (Samkin & Schneider 2010, p. 264). From a reporting perspective, studies usually involve investigating narrative disclosures in documents such as annual reports and attempt to determine whether, under which particular circumstances, and to what extent, organisations engage in impression management. Impression management can be used to conceal or

highlight certain information by manipulating the information that is conveyed through these narratives (Solomon et al. 2013). Importantly, although impression management cannot be observed 'directly' in accounting narratives, one can observe disclosure practices 'consistent with it' (García Osma & Guillamón-Saorín 2011, p. 191). These observations may lend support to the argument that managers are acting in a self-serving and opportunistic manner rather than reporting performance objectively.

Various impression management strategies have been investigated in extant literature. Some studies have analysed narratives such as CEO and Chairman's letters and social and environmental reports to identify strategies such as syntactical manipulation or readability (e.g. Adelberg 1979; Li 2008; Rutherford 2003), rhetorical manipulation using persuasive language (e.g. Jameson 2000; Sydserff & Weetman 2002), thematic manipulation using positive/negative language (e.g. Abrahamson & Park 1994; Clatworthy & Jones 2003) and attribution of organisational outcomes (e.g. Aerts 2005; Baginski, Hassell & Hillison 2000; Clatworthy & Jones 2003; Henry 2008; Lang & Lundholm 2000; Staw, McKechnie & Puffer 1983). In a financial disclosure context, impression management may occur when management selects which information to disclose and presents that information in a manner that is intended to distort readers' perceptions of corporate achievements (Godfrey, Mather & Ramsay 2003; Neu 1991; Neu, Warsame & Pedwell 1998). The manner in which numerical information is presented in documents such as annual reports and press releases, and the choice of which figures to include, may constitute impression management (Merkl-Davies & Brennan 2007; Schleicher 2012).

2.5.2 Impression Management and Earnings Information

Earnings are an important focus for shareholders and investors and therefore 'constitute the most worthwhile information to manipulate in corporate narrative sections' (Merkl-Davies & Brennan 2007, p. 158). In particular the prominence sometimes given to the disclosure of non-GAAP financial measures in press releases and annual reports indicates that they may be 'strategically emphasised by managers in order to influence the perception of the firm's financial results' (Marques 2010, p. 131). As discussed in Section 2.3, different companies use different names for these earnings figures and the calculation of the figures may differ between companies and within the same company over different periods. This means that the

mere presence of these figures may cause confusion for some investors. That being said, the fact that a non-GAAP figure has been disclosed does not, of itself, constitute impression management. It is the manner in which these figures are presented in press releases and annual reports which may constitute impression management.

The reporting of non-GAAP figures has been widespread throughout several countries and earnings press releases have been the dominant disclosure medium used in the literature concerning this phenomenon (e.g. Bowen, Davis & Matsumoto 2005; Brown, Christensen & Elliott 2012; Doyle, Jennings & Soliman 2013; Entwistle, Feltham & Mbagwu 2004, 2005, 2006b; García Osma & Guillamón-Saorín 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Guillamon-Saorin, Isidro & Marques 2017; Hitz 2010; Lougee & Marquardt 2004; Marques 2010). The earnings press release is seen to serve a dual purpose, '(T)he informational purpose is to impart facts about the company's performance, and the promotional (or even persuasive) purpose is to favourably influence readers' views of that performance' (Henry 2008, p. 368). A limited number of studies concerning the reporting of non-GAAP figures have used annual reports (e.g. Cameron, Percy & Stevenson-Clarke 2012; Malone, Tarca & Wee 2016; Rainsbury 2016; Rainsbury, Hart & Buranavityawut 2015), perhaps due to their being less 'timely' than press releases.

Impression management strategies used in the disclosure of non-GAAP profit figures include the choice of which figure to disclose, the use of benchmarks and the manner in which the information is presented. Strategies may be visual or structural and involve the emphasis, ordering and repetition of information and the use of fonts and styles in order to make a piece of information more obvious to readers (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011; Merkl-Davies & Brennan 2007). It may also involve conveying certain information in a positive light and selectively omitting other information (Merkl-Davies & Brennan 2007). These strategies are discussed in detail in the following sections (Sections 2.5.2.1 to 2.5.2.5).

2.5.2.1 Selectivity

Disclosure of non-GAAP earnings information may be manipulated through firms choosing which earnings amounts to use in order to portray current financial performance. There are a range of financial results that could be reported by companies and the impression management strategy of selectivity involves reporting the most favourable items from the information available (Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011). The performance of the company and whether it has achieved previous forecasts may affect the choice of which figures to highlight. For example, Entwistle, Feltham and Mbagwu (2004) found that although the use of non-GAAP figures dominated GAAP figures in their study, if the GAAP result was a record figure or met analysts' forecasts then the company was less likely to report the non-GAAP figure. This finding that non-GAAP figures are used strategically when a firm fails to reach an earnings benchmark based on GAAP is supported by other studies (e.g. Lougee & Marquardt 2004). Guillamon-Saorin, Garcia Osma and Jones (2012) found that good performers are more likely to stress their profitability in press release headlines and use figures from the Profit and Loss Account. However, when GAAP earnings have decreased from the previous period, the company is more likely to emphasise sales or a non-GAAP metric whose components are not defined in the press release.

2.5.2.2 Emphasis, ordering and repetition

Once the particular figures to be disclosed have been chosen, presentational and visual techniques can then be used to emphasise positive performance while downplaying negative outcomes (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011). Techniques may include positioning the positive information (e.g. a non-GAAP measure which is higher than the statutory or GAAP figure) in a prominent position such as a heading or the first paragraph, repeating the figure throughout the disclosure or reinforcing it with a qualifier such as 'excellent', 'improved' or 'strong'. Emphasis can also be achieved using bullet points and particular fonts and typefaces. Studies have shown that people are strongly influenced by the first piece of information to which they are exposed, and this information biases their evaluation of subsequent information (Asch 1946; Hirshleifer & Teoh 2003; Huang, Nekrasov & Teoh 2012; Lim, Benbasat & Ward 2000). In an experimental study using president's letters, subjects relied most on the first

information they read when assessing both the past performance and future prospects of companies (Baird & Zelin 2000). Ordering and emphasis are therefore important, and several studies have found that management emphasises the earnings measure that presents the company's financial performance in the best light – in the majority of cases this is the non-GAAP figure (Bowen, Davis & Matsumoto 2005; Cameron, Percy & Stevenson-Clarke 2012; Entwistle, Feltham & Mbagwu 2004; Marques 2010). As an example, a study using US press releases from 2001-02 found that the non-GAAP figure was given greater prominence than the GAAP figure in 79% of cases. The two figures were given equal prominence in 16% of cases and in only 4% of cases did the GAAP figure dominate (Entwistle, Feltham & Mbagwu 2004). The non-GAAP figure disclosed was higher than the GAAP figure in 87% of the cases and on average was over twice as large.

Bowen, Davis and Matsumoto (2005) examined US press releases from 2001-02 which contained both non-GAAP and GAAP earnings. Using a self-developed emphasis scoring system, they found that companies emphasise the metric that most favourably portrays company performance especially those reporting a non-GAAP profit and a GAAP loss. Interestingly they conclude that the firms are also emphasising the metric that is the most 'value relevant' and chose to use the word 'deliberate' rather than 'opportunistic' when describing the manager's choice of which metric to emphasise. The measure of value relevance used, however, is rather rudimentary with the authors assuming that for firms with a history of prior losses, earnings variability or membership in a high-tech industry, the GAAP results would have low value relevance.

In an extension on this study Marques (2010) also found that firms position the non-GAAP measure first when they wish to provide a positive performance signal. This was particularly the case when non-GAAP earnings were higher than strategic earnings benchmarks and GAAP earnings did not meet the benchmark. In an experimental study, Elliott (2006) found that non-professional investors were influenced to make investment decisions by the emphasis, and not mere presence, of non-GAAP earnings. Using trading reactions as an indicator, Allee et al. (2007) found that less sophisticated investors rely significantly more on press releases with a non-GAAP figure than those without such a figure, and their reliance increases when the non-GAAP figure is placed before the GAAP figure. In both these studies,

which are discussed in more detail in Section 2.6, more sophisticated investors such as analysts appear to be unaffected by the presence or emphasis of the non-GAAP figure.

In one of the few Australian studies into the phenomenon, Cameron, Percy and Stevenson-Clarke (2012) found that more than twice as many companies emphasised non-GAAP profit over GAAP profit in their annual reports and also that the trend was increasing over the years 2007-09 despite the release of the AICD and FINSIA guidelines, *Underlying Profit: Principles for Reporting of Non-Statutory Information* in March, 2009 (AICD & FINSIA 2009).

2.5.2.3 Use of benchmarks

Another impression management strategy used in the reporting of non-GAAP earnings figures is the selection of a prior-period benchmark that allows for a favourable comparison of performance. It is common for companies to compare the current year's results with those of the prior period and this can be useful for the decision making of investors. However, management may strategically focus on a benchmark that allows the most favourable period-to-period comparison, which could mislead investors in their evaluations of company performance (Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011; Henry 2008; Schrand & Walther 2000). There may be an assumption on the part of managers that investors do not use other publicly available information (that is, are not rational) and are misled by the use of a carefully chosen benchmark (Merkl-Davies & Brennan 2007; Schrand & Walther 2000). For example, Guillamon-Saorin, Garcia Osma and Jones (2012), in their investigation of press release headlines from Spanish firms, found about half of the firms in the study positively reinforced performance using a prior period benchmark but in no case was a decrease in performance noted using a benchmark.

Schrand and Walther (2000) argue that managers lower prior-period earnings benchmarks against which current earnings will be compared, by strategically reporting or not reporting separate components of the prior-period earnings. They found that companies are more likely to separately disclose a prior year non-recurring gain on property, plant and equipment than a prior year loss. Reminding investors of a previous gain allows them to adjust the previous period's earnings and therefore provides the lowest possible benchmark against which to

evaluate the current earnings of the company. By not reminding investors of a prior period loss on property, plant and equipment, firms can emphasise a larger increase in earnings. Further, the likelihood that managers will employ this strategy is stronger when doing so prevents a negative earnings surprise. To further investigate the findings of Schrand and Walther (2000), Krische (2005) conducted an experiment using MBA and accounting students, involving whether firms incurred a prior period gain or loss on the sale of equipment and then repeated the information concerning the gain or loss in the current period. She found participants in the experiment made lower valuation judgements when prior year losses were repeated and higher valuation judgements when prior year gains were repeated. These results suggest that investors adjust for prior-period events when reminded of the event in the current year, but not when reminders are absent, even though investors have previously been made aware of the information. Krische (2005) found evidence to suggest that limitations in the memories of investors is the likely cause of this finding.

2.5.2.4 Reconciliation to GAAP profit

As discussed above, extant literature has contended that the use of impression management strategies to emphasise non-GAAP earnings over GAAP figures may mislead investors, particularly non-professionals. However, this confusion may be mitigated by the presence of a clear reconciliation between the figures (Elliott 2006; Marques 2010). Although studies have found that the presence and ordering of non-GAAP figures affected the trading decisions of less sophisticated investors, the presence of a reconciliation to GAAP mitigated this effect (Allee et al. 2007; Elliott 2006).

2.5.2.5 Other strategies

A range of other potential impression management strategies employed in the disclosure of non-GAAP figures have been investigated in previous literature. Entwistle, Feltham and Mbagwu (2006b) examined the use of GAAP terminology to describe what was revealed later in the press release to be a non-GAAP amount. Their study focused on headlines in the press releases of S&P 500 firms in the US from 2001-03 and found 14% used this misleading GAAP terminology in 2001. This decreased to only 1% in 2003 after the introduction of Regulation G by the SEC (see Section 2.8). The authors suggest that the results indicate that

prior to regulation, managers were either careless or intentionally attempting to mislead investors with inappropriate terminology.

A longitudinal study into the relationship between the timing of quarterly earnings press releases containing non-GAAP earnings figures and the manipulation of reported earnings by managers was conducted by Brown, Christensen and Elliott (2012). Managers were found to accelerate the release of press releases in quarters where the release contained a non-GAAP figure compared to quarters where it did not. This acceleration increased with the level of exclusion of recurring expenses and the use of less transparent reconciliation formats. Taking all their results into consideration they concluded that the acceleration of earnings results containing non-GAAP figures is indicative of managerial opportunism.

The above discussion presents the findings of various studies into the impression management tactics that may be used to convey non-GAAP earnings information. Prior research has also investigated the association between corporate governance and impression management with regard to the reporting of these figures and has concluded that companies with stronger corporate governance are less likely to disclose this information in a misleading manner. In a study involving Spanish firms, García Osma and Guillamón-Saorín (2011) found that stronger governance (measured by several proxies including the number of independent directors) lowers the incidence of disclosure practices consistent with both quantitative and qualitative impression management. In particular firms with stronger governance are more likely to issue an annual results press release and are more likely to include negative information rather than only information which is positive in nature. Frankel, McVay and Soliman (2011) investigated earnings announcements from US companies over the years 1998-2005. They found that companies with less independent boards are more likely to exclude recurring items from their non-GAAP earnings figures, a finding that supports opportunistic behaviour. This association declines following the introduction of Regulation G (see Section 2.8) which the researchers conclude provides an alternative monitoring mechanism to independent directors. These findings are supported by Jennings and Marques (2011), also a US study, who additionally found that investors were misled by the non-GAAP figures (which were relatively persistent and positively associated with future returns) reported by firms with weaker governance. They also found that pre-

Regulation G (but not post), firms with weaker governance were more likely to make adjustments to meet or beat analysts' forecasts, a phenomenon discussed in the next section. Table 2.2 presents a summary of studies concerning impression management and the reporting of non-GAAP earnings information.

Table 2.2: Summary of studies concerning impression management and non-GAAP earnings information

Author/Year	Objective and Sample	Results
Entwistle, Feltham and Mbagwu (2004)	To investigate the disclosure of non-GAAP earnings figures and whether they are being used strategically to affect investors' perceptions of performance. Uses EPS from US press releases from 2001-2002.	Emphasis of non-GAAP dominated GAAP in 79% of sample. Non-GAAP figure > GAAP 87% of time - on average over twice as large. If there was strong performance, record GAAP or met analyst forecast then less likely to report non-GAAP figures.
Bowen, Davis and Matsumoto (2005)	To explore the use of managerial emphasis of various earnings figures as a disclosure tool. Uses US press releases from 2001-2002 which disclosed both GAAP and non-GAAP measures.	Firms emphasise metric that most favourably portrays company performance with media coverage affecting manager's emphasis decisions. There was a shift away from non-GAAP emphasis in 2002 – before Reg G but after SEC scrutiny.
Entwistle, Feltham and Mbagwu (2005)	500 US and 300 Canadian firms – used year-end press releases from 2001 and 2002. Used EPS and looked at strategies including emphasis. Emphasis measured by appearance in headline and relative prominence over the whole press release.	Non-GAAP in headline – US 51%, Canada 26%. Non-GAAP disclosed before and is main figure discussed – US 79%, Canada 65%. US firms make significantly more adjustments than Canadian firms to non-GAAP figure. Non-GAAP > GAAP US 86%, Canada 75%. Sometimes earnings figures in headline were not obviously GAAP or non-GAAP – needed full reading of press release.
Elliott (2006)	To investigate how presentational characteristics of non-GAAP earnings announcements influence users' judgements. Experiment using MBA students and analysts in US.	Non-professional investors influenced by emphasis and not mere presence of non-GAAP figures and tend to anchor their earnings judgements on the first earnings information presented. Reconciliations mitigate effect of emphasis.
Entwistle, Feltham and Mbagwu (2006b)	To investigate whether firms were disclosing non-GAAP figures in a potentially misleading manner and whether Reg G affected this behaviour. Uses US press releases from S&P 500 from 2001-2003.	In 2001, 77% disclosed a non-GAAP figure in their headline of which 14% were potentially misleading as they used GAAP terminology when reporting the non-GAAP result. In 2003, 54% disclosed figure but only 1% misleading. The cessation of the practice post Reg G suggests that firms understood that the disclosures had the potential to mislead.
Allee et al. (2007)	To externally validate and extend experimental evidence by investigating non-GAAP disclosure and investor sophistication. Uses US transaction data and trade-size-based proxies to distinguish between classes of investor.	Less sophisticated investors trade significantly more when a non-GAAP figure is present in press release. Price reactions are higher when non-GAAP reported before GAAP. More sophisticated investors not affected.

Table 2.2: Summary of studies concerning impression management and non-GAAP earnings information (continued)

Author/Year	Objective and Sample	Results
Marques (2010)	To investigate if firms strategically emphasise non-GAAP figures when they portray a better performance. Uses press releases for a sample from S&P 500 in US from 2001-2003.	Firms give significant prominence to non-GAAP figures when they are higher than GAAP. This emphasis is negatively associated with SEC scrutiny.
García Osma and Guillamón-Saorín (2011)	To study the association between corporate governance and impression management relating to the disclosure of results in press releases. Uses press releases from Spanish firms from 2005-2006.	Stronger governance lowers incidence of disclosure practices consistent with both quantitative and qualitative impression management.
Brown, Christensen and Elliott (2012)	To investigate the timing of earnings releases containing non-GAAP figures as an impression management tactic. Uses EPS from US press releases 1998-2006.	Firms accelerate earnings announcements that contain non-GAAP figures compared to those that do not and this acceleration increases with the level of managers' exclusions of recurring expenses and their use of less transparent reconciliation formats.
Cameron, Percy and Stevenson-Clarke (2012)	To investigate the presence and prominence of non-GAAP earnings disclosures. Uses Australian annual reports from 2007-2009 from the top 50 non-mining companies.	48 firms in 2007 and all 50 firms in 2008 and 2009 disclosed non-GAAP figures using many different names and methods of calculation. There was more emphasis on non-GAAP figures and this trend increased in 2009.
Guillamon-Saorin, Garcia Osma and Jones (2012)	To examine managerial, self-serving disclosure practices in annual results press release headlines. Uses Spanish press releases from 2005-06 but only looked at the headlines.	There is evidence of persistent impression management in press release headlines. Firms do not include negative information no matter what their overall performance and used 'framing' and benchmarks to emphasise positives even with poor performance.

2.5.3 Calculation of Figures and Manipulation to Meet or Beat Analysts' Forecasts

Apart from selecting which figures to disclose to users, and using emphasis to highlight certain figures, managers who choose to disclose non-GAAP earnings figures must decide on which income and expenses to exclude in the calculation. As discussed in Section 2.3.1, this usually involves the exclusion of less persistent, transitory or one off expenses and income in an attempt to reflect core earnings. However, several studies have documented cases where recurring expenses that may have predictive value have been excluded from the non-GAAP figure (Black & Christensen 2009; Brown, Christensen & Elliott 2012; Doyle, Lundholm & Soliman 2003; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Isidro & Marques 2017; Johnson & Schwartz 2005). Johnson and Schwartz (2005) looked at US press releases for one quarter in 2000 (before any bad press or regulation) and found that, contrary to claims that non-GAAP figures were more persistent, adjustments made to GAAP were large in magnitude, encompassed more than just the elimination of nonrecurring items and often

exceeded adjustments made by analyst tracking services. Additionally, they found no difference in the persistence of the GAAP figures reported by firms that disclosed non-GAAP figures and firms that did not. Therefore, there may be other reasons firms choose to exclude certain expenses from non-GAAP earnings and then report these earnings figures.

Studies have found that firms with GAAP losses, decreases in GAAP earnings or earnings that miss benchmarks are significantly more likely to report non-GAAP figures than firms with GAAP profits or increases in GAAP (Ciccone 2002; Entwistle, Feltham & Mbagwu 2004, 2005; Isidro & Marques 2015; Lougee & Marquardt 2004). Managers may have incentives to meet or beat earnings targets as there are capital market benefits when firms meet or surpass targets and forecasts (Graham, Harvey & Rajgopal 2005; Isidro & Marques 2015). These earnings targets include avoiding losses, reporting increases in earnings and meeting analysts' expectations for the quarter or year (Dechow & Skinner 2000). Firms may attempt to manage earnings expectations by revising forecasts downward or may use actual earnings management to manipulate GAAP earnings (Burgstahler & Eames 2006).

Earnings management involves the exercise of judgement in accounting calculations and financial reporting (also referred to as accruals management) or the manipulation of real activities (Davidson et al. 2004; Doyle, Jennings & Soliman 2013; Elshafie, Yen & Yu 2010; Healy & Wahlen 1999; McVay 2006). The first form of earnings management, accruals management, can occur for example when estimating items such as expected useful lives, salvage values, obligations for leave benefits, doubtful debts and asset impairments. This actually affects the amount of GAAP profit reported and is different to calculating a non-GAAP figure by eliminating certain expenses contained in the GAAP. The second form of earnings management involves managing real activities to change reported GAAP profits and could involve, for example, increasing production to lower cost of goods sold or lowering spending on discretionary expenses such as advertising or research and development. If earnings management is not possible or not successful in adjusting GAAP earnings to meet targets, then other strategies such as impression management may possibly be employed.

Elshafie, Yen and Yu (2010) looked at the association between actual earnings management and managing investor perception using non-GAAP figures. They found that managers report

more aggressive non-GAAP earnings numbers when the GAAP result does not meet earnings targets and the firm has limited ability to use actual earnings management as explained above. As Schrand and Walther (2000, p. 152) explain, '(s)trategic disclosure in earnings announcements is related to earnings management, but the manager is managing the perception of earnings rather than managing actual earnings'. This strategic manipulation of non-GAAP profits to meet or beat earnings targets, particularly when the exclusion of recurring items is involved, can be considered a form of impression management.

There have been several studies investigating the apparent practice of firms adjusting non-GAAP earnings in order to meet or beat forecasts that GAAP earnings failed to reach. Some studies found that the practice increased significantly in years prior to the introduction of Regulation G in the US. For example, Bhattacharya et al. (2004) found the occurrences of non-GAAP earnings per share meeting or beating analysts' forecasts when the GAAP figure did not, increased from 18% to 63% over their sample period of 1998-2000. The involvement of various types of impression management tactics is also evident. Studies have variously found the strategic exclusion of recurring items in order to meet or beat forecasts (Doyle, Jennings & Soliman 2013; Frankel, McVay & Soliman 2011; Isidro & Marques 2015), strategic emphasis and positioning of non-GAAP earnings which meet or beat when GAAP did not (Marques 2010) and the acceleration of announcements containing non-GAAP figures which increases with the level of exclusions and less transparent reconciliations (Brown, Christensen & Elliott 2012). Of concern is that analysts and investors do not appear to fully incorporate this behaviour into their forecasts and decision making (Chen 2010; Doyle, Jennings & Soliman 2013). The practice of excluding recurring items from non-GAAP figures appears to have been constrained by the introduction of Regulation G in the US (see Section 2.7 for a discussion on the effect of regulation). Table 2.3 provides a summary of studies into the calculation of non-GAAP earnings figures and the use of such figures to strategically meet or beat analysts' forecasts.

An interesting insight into how managers can manipulate non-GAAP figures without necessarily inviting the scrutiny of auditors and regulators is provided by McVay (2006) who investigated classification shifting by firms. This practice involves 'shifting' items down the income statement from core, recurring expenses such as Cost of Goods Sold to special items.

Table 2.3: Summary of studies into exclusion of recurring items from non-GAAP figures and calculation of such figures to meet or beat

Author/Year	Objective and Sample	Results
Ciccone (2002)	To investigate the use of non-GAAP earnings to manipulate the perception of performance. Used earnings per share (EPS) from 1990-2000 from First Call tracking service (US data).	Firms with GAAP losses and decreases in GAAP report significantly higher non-GAAP earnings. These are reported more frequently and with higher magnitude than firms with GAAP profits and increases in GAAP.
Doyle, Lundholm and Soliman (2003)	To investigate whether expenses excluded from non-GAAP provide incremental information about future cash flows and whether stock market prices these exclusions. Uses I/B/E/S EPS 1988-99 (US data).	Found statistically and economically significant relationships between future cash flows and expenses excluded. Market does not fully appreciate the predictive power of these exclusions.
Bhattacharya et al. (2004)	To provide descriptive evidence on non-GAAP reporting including expense exclusions and meet or beat behaviour. Uses US press releases containing non-GAAP EPS issued between Jan 1998 and Dec 2000.	Firms exclude multiple expenses from non-GAAP EPS and exclusions differ in subsequent quarters. Non-GAAP meeting or beating analyst forecast when GAAP did not, increased from 18% to 63% over sample period. GAAP decrease but non-GAAP increase increased from 12% to 44%.
Entwistle, Feltham and Mbagwu (2004)	To investigate the disclosure of non-GAAP earnings figures and whether they are being used strategically to affect investors' perceptions of performance. Uses EPS from US press releases from 2001-2002.	If there was strong performance, record GAAP or GAAP met analyst forecast then less likely to report non-GAAP figures.
Entwistle, Feltham and Mbagwu (2005)	To compare the voluntary disclosure of non-GAAP earnings in the US and Canada. Uses EPS from 500 US and 300 Canadian firms' year-end press releases from 2001 and 2002.	Both US and Canadian firms are significantly more likely to report a non-GAAP figure when their GAAP figure failed to meet earnings forecasts.
Johnson and Schwartz (2005)	To investigate whether investors are misled by non-GAAP disclosures. Looks at the share price investors assign to non-GAAP firms compared to other firms but also analyses the non-GAAP disclosures themselves. Uses US press releases June to August 2000.	Adjustments made go beyond the elimination of nonrecurring or special items. Exclusions are described using vague nomenclature and there are few reconciliations (data pre Reg G). No difference in the persistence of GAAP between disclosing and non-disclosing firms.
McVay (2006)	To investigate classification shifting – shifting items down the income statement from core, recurring expenses to special items, thereby allowing easier manipulation of non-GAAP earnings. Uses US data from 1988-2003 from I/B/E/S and Compustat.	Core items are moved to special items, especially to enable firms to meet analysts' forecasts.
Black and Christensen (2009)	To investigate the type of adjustments managers use to achieve strategic earnings benchmarks that were missed based on GAAP earnings. Uses EPS from US press releases 1998-2003.	Managers often exclude recurring items. Most firms using non-GAAP to meet or beat do so by excluding recurring items. Firms that report non-GAAP sporadically are more likely to be attempting to meet or beat.
Chen (2010)	To investigate the persistence of items excluded from non-GAAP earnings, particularly in order to meet or beat. Uses I/B/E/S and Compustat (US data) from 1992 to 2005 and differentiates between meet or beat exclusions and non-meet or beat exclusions.	Analysts underestimate persistence of non-meet or beat exclusions but not meet or beat exclusions. Underestimation declined post Reg G. Investors underestimate persistence of all exclusions in pre but not post period. Reg G constrained practice of excluding recurring expenses to meet or beat.

Table 2.3: Summary of studies into exclusion of recurring items from non-GAAP figures and calculation of such figures to meet or beat (continued)

Author/Year	Objective and Sample	Results
Elshafie, Yen and Yu (2010)	To investigate association between actual earnings management and managing investor perception using non-GAAP figures. Uses US 2001-07 non-GAAP earnings announcements.	Managers report more aggressive non-GAAP earnings numbers when they do not meet earnings objectives or have limited ability to use earnings management.
Marques (2010)	To investigate if firms strategically emphasise non-GAAP figures to meet or beat when GAAP does not. Uses press releases for a sample from S&P 500 in US from 2001-2003.	Firms strategically emphasise non-GAAP earnings by positioning them first when non-GAAP meets or beats analyst forecast and GAAP does not.
Frankel, McVay and Soliman (2011)	To investigate the association between board independence and the quality of non-GAAP earnings. Uses variety of US data from 1998-2005.	Firms with less independent boards are more likely to opportunistically exclude recurring items from non-GAAP figures. Association declines and is not significant following Reg G. Insider selling increases when non-GAAP meets or beats analyst forecast.
Brown, Christensen and Elliott (2012)	To investigate the timing of earnings releases containing non-GAAP figures as an impression management tactic. Uses EPS from US press releases 1998-2006.	Firms accelerate earnings announcements that contain non-GAAP figures. This acceleration increases with the level of exclusions of recurring expenses and the use of less transparent reconciliation formats.
Doyle, Jennings and Soliman (2013)	To investigate whether managers use their discretion to define non-GAAP earnings that meet or beat analyst forecasts. Uses US EPS from 1988-2009 from I/B/E/S and a dataset from press releases.	Managers opportunistically define non-GAAP earnings to exceed analyst forecasts and analysts do not fully incorporate this behaviour into their forecasts.
Isidro and Marques (2015)	To investigate whether country level institutional and economic factors influence meet or beat behaviour. Uses European press releases from 316 firms from 2003-07.	When GAAP misses benchmark more likely to report non-GAAP, have non-GAAP meet or beat and exclude recurring items. This is more likely in countries with stronger law and investor protection and developed financial markets where it is more difficult to manipulate GAAP.
Guillamon-Saorin, Isidro and Marques (2017)	To investigate market reaction to non-GAAP earnings measures, which are combined with high levels of impression management. Uses European press releases from 243 firms from 2003-09.	Non-GAAP measures are generally informative to capital markets. However, adjustments are more persistent where high impression management is evident. Investors in sophisticated markets decipher this tactic and penalise these firms while investors in less sophisticated markets do not react to these tactics.

Although this does not change the actual GAAP profit reported it does allow easier manipulation of non-GAAP figures as 'special items' are usually excluded from GAAP in the calculation of the non-GAAP profit. She found the practice is especially evident in firms where the non-GAAP figure just meets the analyst forecast (and the GAAP figure did not) indicating that this may have been the objective of the practice. Manipulating the calculation of non-GAAP profits to meet or beat analysts' forecasts or to obfuscate a GAAP loss or decrease in GAAP earnings, has the potential to mislead shareholders and investors,

particularly less sophisticated ones. Insight into how shareholders and investors react to the disclosure of non-GAAP profit figures is provided in the next section.

2.6 The Reaction of Investors

Whether the reporting of non-GAAP profits provides value relevant, incremental information or is in fact misleading, it is important to determine if and how shareholders and investors react to the disclosure of such figures and whether they perceive them to be useful in their decision making. Previous studies have found that investor's perceptions of the usefulness, relevance and reliability of the voluntary disclosure of non-GAAP figures depends on their level of sophistication. James and Michello (2010) conducted a survey to examine investor perceptions of non-GAAP earnings compared to GAAP earnings. Participants were divided into professionals (analysts and fund managers) and non-professionals (MBA students) and surveyed with regard the decision usefulness of both types of earnings figures. The key finding of the study was that both groups perceived the reporting of non-GAAP earnings as less useful than GAAP reporting. Although this result was significant for all groups in the study, it was less evident in the non-professional investors. Despite the results of this survey, experimental studies have found that investors do use, and are influenced by, the presence of non-GAAP profit figures, particularly less sophisticated investors.

Experimental studies, where participants are given a set of results and asked to make investment decisions based on the information, have rendered interesting results which indicate that the way investors are actually affected by, and react to the disclosure of non-GAAP figures may differ from their perceived usefulness of such figures. Frederickson and Miller (2004) conducted an experiment to examine the effect of non-GAAP earnings disclosures on the judgements of sophisticated users (analysts) and less sophisticated users (MBA students). Less sophisticated users who received both non-GAAP and GAAP figures assessed a higher stock price than those who received only GAAP figures. However, analysts' stock price judgements were not affected by the disclosure of non-GAAP figures. Follow up questions revealed that these results may be explained by the different valuation models and information processing between the two groups. The analysts used well-defined

valuation models based on either earnings-multiples or cash flows whereas the less sophisticated investors used simpler, heuristic-based models.

Elliott (2006) extended Frederickson and Miller's work by including the effect on investment decisions of emphasis (rather than mere presence) of non-GAAP earnings and the presence of reconciliation to GAAP earnings (as required in the US by Regulation G). Interestingly, non-professionals were influenced by the emphasis of non-GAAP earnings figures and not merely by their presence whereas professionals were unaffected by this manipulation. The results for non-professional participants where GAAP earnings were emphasised over non-GAAP were similar to those where only GAAP earnings were reported, confirming that it was emphasis and not merely the presence of the non-GAAP figure that influenced the non-professionals. This influence was mitigated by the presence of a reconciliation to GAAP figures with non-professional participants assessing earnings to be lower and investing a smaller amount when a reconciliation was included. In contrast, professional investors (analysts) assessed performance as higher and invested more when non-GAAP earnings were emphasised and reconciled to GAAP with further analysis revealing that the reconciliation provided transparency and thereby affected the analysts' perceptions of the reliability (rather than relevance) of the number.

An important finding of both these studies is that the influence of the non-GAAP number on less sophisticated users appears to be the result of an unintentional cognitive effect rather than their reliance on the number due to the perceived informativeness of the figure. This finding was established through questioning of participants on how relevant and informative they perceived the non-GAAP figure to be. In both studies, participants in the non-professional groups stated that they found the non-GAAP earnings no more relevant or informative than the GAAP earnings, a finding that supports the survey conducted by James and Michello (2010) (see discussion above). However, although non-professionals did not perceive the non-GAAP figure to be any more informative, its presence (or emphasis) still caused the participants to make higher valuations of the fictitious firms leading the authors to conclude that it affected their perceptions of the overall favourableness of the earnings announcement (Frederickson & Miller 2004) and unintentionally affected their decision making.

The findings of a Swedish based experiment (Andersson & Hellman 2007) using only professional investors (analysts) did not support the findings of Frederickson and Miller (2004) and Elliott (2006). Participants who received both non-GAAP and GAAP earnings announcements made significantly higher earnings per share predictions than those who only received GAAP statements. The difference between the two sets of figures was substantial and included a non-GAAP profit and GAAP loss and the authors considered this may be one reason for the differing results. It is possible that the analysts simply found the extra information provided in the non-GAAP sample to be value relevant in a situation where the figures were so different. The studies conducted in the US made sure the GAAP information was detailed enough to enable calculation the non-GAAP information, even if a non-GAAP figure was not provided but it is unclear if this was the case in the Swedish study.

Although the external validity of these studies is questionable due to small sample size and the use of MBA students as a proxy for less sophisticated investors in some of the experiments, the results call into question the claims by management that non-GAAP earnings figures provide incremental, value-relevant information. The studies instead infer that less sophisticated investors may in fact be misled by the disclosure of such figures whereas professional investors have more expertise, approach investment tasks differently and better understand the difference between GAAP and non-GAAP figures. Professionals are therefore less likely to intentionally or unintentionally rely on the non-GAAP figure simply because it is emphasised.

One of the few Australian studies concerning non-GAAP profits sheds further light on the manner in which these figures affect investors, particularly less sophisticated investors. Johnson et al. (2014) used an experimental design involving undergraduate accounting students but did not investigate the making of investment decisions. Instead, participants were required to demonstrate their understanding of earnings information by identifying some basic financial measures such as current year profit, movement in profit and earnings per share. Those who were provided with both types of earnings information tended to focus on the emphasised non-GAAP information when answering the questions. The authors conclude

that there is a positive association between the prominent disclosure of non-GAAP earnings information and the reliance by non-sophisticated investors on this information. Indeed, the findings implied that some less sophisticated investors may have had difficulty in perceiving the difference between the two types of earnings figures.

These experimental studies have been extended into a real world setting with research investigating who trades on non-GAAP earnings information. Using transaction data and trade size to distinguish between larger, sophisticated investors and smaller, less sophisticated investors, Bhattacharya et al. (2007) examined who responded to quarterly earnings press releases containing non-GAAP disclosures. They found that abnormal trading by less sophisticated users was significantly positively related to non-GAAP earnings disclosure but there was no association between the earnings reported and sophisticated investors' trading. Sophisticated investors either avoided trading altogether in the days surrounding the announcement or traded late in the period. Interestingly, further study of a matched group of earnings announcements that did not contain any non-GAAP figures showed professionals did trade significantly around these particular announcements.

Similar results were attained by Allee et al. (2007) who found less sophisticated investors trade significantly more, and in the direction of the earnings surprise, when a non-GAAP earnings number was present in a press release. These reactions were higher when the non-GAAP figure was reported before GAAP earnings. Sophisticated investors actually traded less, or in the opposite direction to the earnings surprise. Extending the work of Elliott (2006), Allee et al. also investigated the effect of the presence of a reconciliation to GAAP and found that the reactions of both non-sophisticated and sophisticated investors were no longer significant. However, this result must be considered in light of the variable used for the presence of a reconciliation; that is, a simple proxy which assumed all announcements in 2003 contained a reconciliation and all announcements before this date did not.

In a more recent European study, Guillamon-Saorin, Isidro and Marques (2017) investigated market reaction to the disclosure of non-GAAP figures, which were combined with high levels of impression management, in earnings announcement press releases. While they

found that non-GAAP measures were generally informative to the market, firms using high levels of impression management made adjustments that were more persistent. This practice was interpreted as managers attempting to distort the perceptions of users when non-GAAP earnings figures are of lower quality. Contrary to results from US studies, their results show that market participants were able to recognise the use of impression management and discount the non-GAAP information. Investors in more sophisticated markets penalised the firms that combined non-GAAP measures with high impression management.

The results from these various studies into how investors react to the disclosure of non-GAAP profit figures generally find that non-professional or less sophisticated investors seem to be more affected than professionals such as analysts. However, this reaction may be tempered by the presence of a reconciliation between the non-GAAP figure and GAAP earnings. Studies have also concluded reactions to non-GAAP figures may be due to unintentional cognitive effects rather than a perception that the figure is more relevant. The finding by Elliott (2006) that it is emphasis rather than presence of the non-GAAP figure that affects investor's decision making is of particular interest. Managers may exploit this salience effect by emphasising the better performance metric in an attempt to influence the decisions of investors. The fact that emphasis placed on non-GAAP earnings, and the need for a clear reconciliation, is specifically addressed by both Regulation G in the US and the Regulatory Guide 230 in Australia suggest that the SEC and ASIC regard emphasis as an important disclosure tool which may be open to manipulation.

2.7 The Effect of Regulation

ASIC has attempted to regulate the reporting of non-GAAP profits in Australia with the release of Regulatory Guide 230 *Disclosing non-statutory financial information* in December 2011 (to be discussed in Chapter 3). Regulation of the practice in the United States occurred much earlier than in Australia. Concerns were raised by the SEC as early as 2000 (Entwistle, Feltham & Mbagwu 2006a) about the way non-GAAP earnings were estimated and the lack of comparability between firms, and between periods for individual firms. Especially concerning was the lack of any reconciliation to GAAP figures and, in some instances, a total lack of disclosure of the GAAP results (Levinsohn 2002). The use of non-GAAP earnings

was regulated through section 401(b) of the Sarbanes-Oxley Act of 2002 (SOX) which directed the SEC to issue regulations to ensure non-GAAP financial information is not misleading and is reconciled to GAAP. To implement the provisions of SOX, the SEC issued 'Conditions for Use of Non-GAAP Financial Measures' which led to the creation of Regulation G in 2003. This regulation did not prohibit the use of non-GAAP income measures or imply that their use should be reduced (Entwistle, Feltham & Mbagwu 2006a). Rather, it attempted to increase transparency by requiring companies to explain how any non-GAAP measures are calculated and why the company considered the measures useful (Holtzman, Fonfeder & Yun 2003). In addition, non-GAAP figures must not be given prominence over GAAP numbers. The literature shows that immediately following the introduction of Regulation G there was a 'substantial change' (Entwistle, Feltham & Mbagwu 2006a, p. 51) to the way many US companies reported non-GAAP results, changes which were not explained by other considerations such as changes in accounting standards.

Firstly, although Regulation G did not prohibit the use of non-GAAP measures, research has found that the introduction of the regulation led to a decrease in the use of such figures in press releases. Entwistle, Feltham and Mbagwu (2006a) found the reporting of non-GAAP earnings per share by S&P 500 firms decreased in a highly significant manner from 77% in 2001 to 54% in 2003. Breaking the sample into industry type revealed that each industry other than energy (which remained constant) showed a decline in the percentage of firms reporting non-GAAP earnings after regulation. Consumer goods had the largest decrease of 45%, closely followed by financial (43%) and technology (40%). Taking a broader approach by looking at all non-GAAP financial measures, Marques (2006) found a clear decrease from 63% in 2001 to 50% in 2003. Specifically, for non-GAAP earnings the percentage of firms using these figures in press releases decreased from 52% to 32%.

Although research shows there were changes in the number of firms using non-GAAP amounts, different possible reasons for this decline have been postulated. Some studies propose that the decline in use may be due to a reduction in the opportunistic use of such figures, especially as the new regulation required reconciliation to GAAP figures which made manipulation of non-GAAP figures more transparent (Entwistle, Feltham & Mbagwu 2006a; Jennings & Marques 2011; Marques 2006; Yi 2012; Zhang & Zheng 2011). Kolev,

Marquardt and McVay (2008) investigated the 'quality' of the exclusions made (whether the exclusions were more transitory) to arrive at the non-GAAP figures. Comparing firms that stopped disclosing non-GAAP figures with those that continued to do so, they found significantly poorer exclusions pre-regulation in firms that stopped disclosing post-regulation. They suggest this alludes to regulation halting some opportunistically motivated firms from continuing with the practice, a finding supported by Yi (2012). Another suggestion was that the decline may be due to the bad press the use of the figures had received leading up to, and at the time of regulation (Kolev, Marquardt & McVay 2008; Marques 2006). As one study contends 'there are potential reputation costs if investors now question the motives of managers who release non-GAAP performance measures'(Kolev, Marquardt & McVay 2008, p. 162). However, this suggestion is contradicted by findings that investors perceive post-regulation non-GAAP disclosures as more transparent and consider them more useful than GAAP figures (Black et al. 2012; Yi 2012).

Secondly, firms not only changed whether or not they reported non-GAAP information but some of those who chose to continue reporting non-GAAP figures changed the magnitude and type of variations made to GAAP figures. Studies have variously found: a sharp decrease in the difference between non-GAAP and GAAP earnings per share (Entwistle, Feltham & Mbagwu 2006a; Heflin & Hsu 2008); an increase in the quality of items excluded from non-GAAP figures, that is, the exclusions were more transitory (Frankel, McVay & Soliman 2011; Jennings & Marques 2011; Kolev, Marquardt & McVay 2008); a significant decrease in the proportion of firms reporting a non-GAAP figure greater than the GAAP figure (85% in 2001 to 67% in 2003 for earnings per share figures) (Entwistle, Feltham & Mbagwu 2006a); and a decline in the probability that firms disclose earnings that meet or beat analysts' forecasts (Black et al. 2012; Black et al. 2017; Heflin & Hsu 2008; Jennings & Marques 2011). Chen (2010) concludes that the introduction of Regulation G constrained the practice of excluding recurring expenses from non-GAAP results in order to meet or beat earnings targets and that analysts and investors were better able to understand these exclusions in the post-regulation period. A stark example of the change in magnitude between non-GAAP and GAAP figures is provided by Entwistle, Feltham and Mbagwu (2006a) in their study of S&P 500 firms, where they note that the average difference between non-GAAP and GAAP earnings per share in 2001 was 0.76 cents. This figure rose to $1.23 in

2002 but declined quite astoundingly in 2003 to 0.33 cents (they propose a possible explanation of the increase in 2002 as large write-offs to GAAP resulting from the post-Enron stock market downturn).

Finally, Regulation G requires that non-GAAP figures not be given prominence over GAAP figures and studies have found that disclosing firms generally changed the way they presented non-GAAP information in their press releases (Entwistle, Feltham & Mbagwu 2006a, 2006b; Heflin & Hsu 2008; Marques 2010). For example, Entwistle, Feltham and Mbagwu (2006a) reported a 77% decrease in the extent that non-GAAP discussion dominated GAAP and noted the shift was to giving equal prominence to both figures. They found that 44% of firms reporting non-GAAP figures were less likely to put the figures in the headlines of the press release compared to before regulation. They also noted a significant decrease in the use of 'traditional GAAP terminology' being used to report non-GAAP figures in headlines, from 38 firms in 2001 to only three in 2003 (Entwistle, Feltham & Mbagwu 2006a, p. 48). As part of the presentation requirements, Regulation G requires all non-GAAP figures to be reconciled to GAAP figures. Zhang and Zheng (2011) found that the presence of reconciliation has a significant effect on mispricing of non-GAAP disclosures. Prior to Regulation G, mispricing of securities in non-GAAP reporting firms was limited to those that provided little or no reconciliation. However, after the introduction of the regulation there was no further evidence of mispricing due to non-GAAP disclosures, indicating that improved reconciliations reduced the extent of security mispricing by investors.

The above discussion documents research into the immediate reaction to the introduction of regulation concerning the use of non-GAAP earnings figures in the US and shows a decrease in the use of such figures in quarterly press releases in 2003. Interestingly, however, more recent studies have investigated beyond this initial post-regulation period and have reported that the significant decline in the disclosure of non-GAAP figures coinciding with the passage of Regulation G was only temporary and use of the figures rose sharply after 2003 (Black et al. 2012; Brown et al. 2012). Black et al. (2012) found that by the end of 2006, the frequency of non-GAAP earnings disclosures in quarterly press releases exceeded the pre-Regulation G period. Despite this they conclude that post-regulation non-GAAP disclosure has improved in 'quality' and that regulation has brought heightened awareness to investors

about the use of such disclosures. They found that investors continued to pay more attention to non-GAAP figures compared to GAAP figures in the post-regulation period and suggest investors may feel safer doing so due to the increased transparency provided by regulated reconciliation of the two figures. It is important to remember that neither Regulation G in the US or Regulatory Guide 230 released by ASIC in Australia prohibit the use of non-GAAP earnings figures, they simply dictate how they are to be reported.

In Europe the practice of disclosing non-GAAP earnings figures is also prevalent. Studies involving press releases in European countries including Germany and the Netherlands have found that the practice is frequent and prominent with the non-GAAP figure generally being given greater emphasis than GAAP results (Hitz 2010; Isidro & Marques 2015; Koning, Mertens & Roosenboom 2010). Concerns have been raised by organisations such as the Committee of European Securities Regulators (CESR), the European Financial Reporting Advisory Group (EFRAG), and by some national authorities, with CESR issuing voluntary recommendations on alternative performance measures in October 2005 (Isidro & Marques 2015). However, unlike Regulation G in the US, 'guidance is not mandatory and national regulation is either absent or incomplete' (Isidro & Marques 2015, p. 98). The studies by Hitz (2010) and Koning, Mertens and Roosenboom (2010) provide an interesting contrast on the effect of recommendations issued by a regulatory body as opposed to negative media coverage. The study conducted in Germany (Hitz 2010) straddles the introduction of guidelines on presenting alternative profit measures by the CESR. The findings indicate that the guidelines had no discernible influence on the practice of reporting alternative profit figures, with no decline in frequency or emphasis nor increased quality of reconciliation to GAAP. On the other hand, the study conducted in Holland (Koning, Mertens & Roosenboom 2010) looked at the effect of negative media attention on the practice and found that the decisions of both managers on how to report the figures and of investors on whether to use the figures was influenced by the media attention. The magnitude of the adjustments to GAAP became smaller and the effect was stronger in firms that were specifically criticised in the press.

New Zealand does not have mandatory guidelines on the reporting of non-GAAP earnings, but the New Zealand Financial Markets Authority did introduce a Guidance Note on the

practice effective from 1 January 2013. Similar to other guidelines it suggests the non-GAAP figure not be given undue prominence, be reconciled to GAAP earnings and be calculated consistently from period to period. Rainsbury (2016) examined the influence of these guidelines and found they had little effect on the number of companies reporting non-GAAP earnings. She did find that the guidelines improved reporting practices, particularly with regard to giving non-GAAP figures undue prominence. However, the research raised concerns about the lack of explanations concerning non-GAAP calculations and adjustments and also about the reporting of multiple adjusted earnings figures being used to explain performance.

The underlying motivation of any regulation or guidelines has been to make the reporting of non-GAAP information more transparent and less 'misleading' in order to protect the interests of shareholders and investors. Whether this goal has been achieved in the Australian context with the release of the AICD and FINSIA guidelines, *Underlying Profit: Principles for Reporting of Non-Statutory Information* (AICD & FINSIA 2009), and ASIC's Regulatory Guide 230 *Disclosing non-statutory financial information* (ASIC 2011), is yet to be determined.

2.8 Summary

Voluntary disclosure of information by management is seen as an attempt to overcome information asymmetry. Management argue that they are providing incremental information demanded by shareholders and other stakeholders to assist in decision making. Alternatively, it has been argued that management is exploiting information asymmetry by providing, and in particular emphasising, information that portrays the company in the best light. Studies have found that unsophisticated investors are misled by non-GAAP profit figures when they are emphasised over other figures. However, this is not the case when they are given equal prominence with GAAP figures or when a reconciliation to the GAAP figure is provided. Therefore, it appears that ASIC and the SEC are on the right track with regulation that states it is acceptable to use these figures, but they should not be given undue prominence and a reconciliation should be provided. However, the fact that companies calculate the figures in different ways, using different terminology and perhaps differing in calculation from year to

year is still of concern. Although some studies suggest the incremental information and strategic impression management explanations for the reporting of non-GAAP profit are mutually exclusive, it is likely both motives co-exist 'with the particular driver varying across firms and time conditional on prevailing reporting incentives' (Young 2014, p. 451).

The majority of literature discussed in this chapter relates to the situation in the US, where strict regulation has been in place since 2003, or in Europe and to date there has been limited investigation of this phenomenon in Australia, exceptions include Cameron, Percy and Stevenson-Clarke (2012); Islam et al. (2018); Johnson et al. (2014); Malone, Tarca and Wee (2016); Sek and Taylor (2011); Sinnewe, Harrison and Wijeweera (2017). This study aims to help fill this gap in the literature by studying the reporting of non-GAAP profit figures in Australia where, unlike the US, the practice remained unregulated until the release of the ASIC Regulatory Guide 230 in December 2011. In the next chapter, the regulatory and institutional influences on the reporting of non-GAAP profits in Australia will be described. The effect of the *Corporations Act 2001*, which governs accounting and financial reporting, along with accounting standards and the introduction of guidelines from both professional bodies and ASIC will be discussed. The results of industry studies into the practice will also be reported.

Chapter 3

The Regulatory Environment and the Reporting of Non-GAAP Profits in Australia

3.1 Introduction

This chapter describes the regulatory and institutional influences on the reporting of profits, including non-GAAP profits, by Australian companies. The practice of reporting non-GAAP profit figures by Australian companies became prevalent in the early 2000s and by the end of that decade some industry members were calling the practice 'well and truly entrenched' (Deloitte 2009, p. 4). Reasons put forward for the trend include changes to accounting standards, including the adoption of IFRS, and economic volatility both during and subsequent to the GFC (Deloitte 2009, 2010; Smith 2010). The regulatory requirements dictated by the *Corporations Act 2001* (Cth), including the associated accounting standards, are discussed in Section 3.2. Concern over the use of non-GAAP profit figures has prompted a response from regulators and other bodies. Section 3.3 reports on the release of guidelines by professional associations followed by the release of a Regulatory Guide by ASIC. Reports by industry bodies into the practice of reporting non-GAAP profit figures are discussed in Section 3.4 and the chapter concludes with a summary in Section 3.5.

3.2 The Regulatory Environment

Accounting and financial reporting by companies in Australia is governed by the *Corporations Act 2001* (Cth) and principles contained in Accounting Standards. The effect this statute and the standards have on profit calculation is discussed below.

3.2.1 The Corporation Law

Profit is calculated and disclosed as part of the financial report of a company. In Australia, financial reports of companies are comprised of financial statements, notes to the financial statements and the directors' declaration about the statement and notes. These contents are stipulated by s295 (for annual financial reports) and s303 (for half-yearly annual reports) of the *Corporations Act 2001* (Cth).

The annual and half-yearly financial reports must comply with accounting standards under s296 and s304 *Corporations Act 2001* (Cth). The financial statements and notes for a financial year and half-year must give a 'true and fair view' of the financial position and performance of the entity (s297 and s305 *Corporations Act 2001*) but this requirement does not affect the obligation to comply with accounting standards. If a situation arises where the financial statements and notes prepared in accordance with the accounting standards would not give a true and fair view, the standards must still be followed but additional information must be included in the notes to the financial statements (s295(3)(c) and s303(3)(c) *Corporations Act 2001* (Cth)). This legal requirement to follow accounting standards, combined with the introduction of IFRS in Australia, may have affected the decision to report (and perhaps emphasise) alternative non-GAAP profit figures.

3.2.2 Australian Accounting Standards

Australia adopted IFRS effective from annual reporting periods commencing on or after 1 January 2005. From this date all Australian listed entities were required to adopt the Australian equivalents to IFRS (that is, AIFRS) and no early adoption of the standards was permitted. The Australian Accounting Standards Board (AASB) issues Australian Accounting Standards which contain requirements, content and wording of IFRSs. The wording of an IFRS may be changed if there is a need to account for the Australian legislative environment, for example to refer to the *Corporations Act 2001*. The AASB may also require additional disclosures or limit the number of options and disclosure requirements of IFRSs to meet Australian conditions.

At the time of adoption of IFRSs there were a number of major differences between existing Australian Accounting Standards and those issued by the International Accounting Standards Board (IASB). The removal of these differences 'had major implications for how financial accounting is undertaken within Australia' (Deegan 2010, p. 7) and it has been suggested that the change to IFRS compelled companies to adopt different ways of expressing earnings and profits (Deloitte 2009). Differences in some of the standards from the previous Australian standards affected the way specific transactions were recognised, measured and disclosed, which in turn affected the resulting reported profits. In particular it was expected that accounting for goodwill, intangible assets, non-current assets (impairment testing), share-

based payments, taxation and financial instruments would be affected (Chalmers, Clinch & Godfrey 2011; Cotter, Tarca & Wee 2012). It follows that the adoption of IFRS was expected to have significant effects on reported net profit and shareholders' equity (Wang & Welker 2011). Due to the notable differences between existing Australian Accounting Standards and IFRS, companies may have felt the need to adopt different ways of expressing earnings and profits (Deloitte 2009) including the use of non-GAAP profit figures.

While several standards affect the way transactions, and therefore profits, are measured and calculated, some standards have a direct impact on the manner in which companies present their financial results to stakeholders. For example, AASB 101 *Presentation of Financial Statements* prescribes the basis for presentation of general purpose financial statements and sets out requirements for their content and presentation, along with guidelines for their structure. It requires financial statements to be presented fairly and presumes the application of AIFRSs will achieve a fair presentation. However, although some items to be disclosed concerning profit or loss are listed in the standard (see para 82, Australian Accounting Standards Board 2015), there is scope to present extra information in the financial statements. The standard states that a fair presentation requires an entity 'to provide additional disclosures when compliance with the specific requirements in Australian Accounting Standards is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance' (Australian Accounting Standards Board 2015, par. 17(c)).

With regards to the Statement of Profit or Loss and Other Comprehensive Income in particular the standard encourages the presentation of 'additional line items, headings and subtotals …… when such presentation is relevant to an understanding of the entity's financial performance' (Australian Accounting Standards Board 2015, par. 85). This may have enabled some companies to present some non-GAAP figures in the financial statements themselves. However, it is worth noting that paragraph 87 of the standard, having effect from 2004, does not permit the presentation of any items of income or expenses as 'extraordinary' items. There has been concern over a number of decades in Australia regarding the potentially opportunistic classification of operating expense items as extraordinary or abnormal (Cameron & Gallery 2008; Coulton et al. 2016) and a series of restrictions on how these

items are measured and reported have been introduced since the late 1990s (Coulton et al. 2016). Paragraph 87 of AASB101 has been in effect since 2004. The practice of including non-GAAP profit figures in financial statements is not permitted except in exceptional circumstances under ASIC Regulatory Guide 230, released in 2011 (see discussion below). However, the disclosure of non-GAAP figures outside the financial statements is permitted and there is no requirement that the figures be audited. As discussed in Section 2.3.1, these figures are often calculated by removing expenses that would have been considered 'abnormal' or 'extraordinary' in the past.

3.3 Guidelines and Regulatory Guides

While the *Corporations Act 2001* (Cth) along with AIFRSs help regulate the preparation and presentation of annual and financial reports in Australia, they do not provide specific guidance on the use of non-GAAP profits or other non-GAAP financial information. To fill the gap, professional bodies and ASIC have specifically responded to the practice of disclosing such information.

3.3.1 AICD and FINSIA Guidelines

In March 2009 the AICD and the FINSIA issued *Underlying Profit: principles for reporting of non-statutory profit information* on the reporting of non-GAAP profit information (AICD & FINSIA 2009). FINSIA is a professional association representing the financial services industry in Australia and in 2009, when the guidelines were produced, the association had more than 17,000 members. AICD is a member-based, not-for-profit organisation for directors and when the guidelines were produced this organisation had more than 23,000 members. The guidelines define the term 'underlying profit' as a figure adjusted from statutory profit which 'reflects the directors' assessment of the result for the ongoing business activities of the company' (AICD & FINSIA 2009, p. 7). Interestingly, the guidelines appear to encourage companies to report an underlying profit figure. The guidelines state that the issuing bodies 'believe that the market is assisted by the additional reporting of an underlying profit figure' (p. 15) but suggest it should be clearly differentiated from the statutory profit and be transparent, consistent and reconciled to the statutory figure. The guidelines also state

that there should be an indication of whether the figure has been audited (p. 18). The guidelines comprise seven principles which are summarised in Table 3.1.

Table 3.1: Principles for reporting underlying profit (AICD and FINSIA)

Principle	Summary of Recommendation
Principle 1 – Report on the underlying profit, where relevant, in addition to the statutory profit	Encourages the reporting of an underlying profit figure. Companies should clearly differentiate the underlying profit figure from the statutory profit and not give undue prominence to the underlying profit figure. The figure should be transparent and consistent.
Principle 2 – Use the term 'underlying profit'	For consistency between companies, the term 'underlying profit' should be used in preference to other terms. Terms such as 'normalised' and 'sustainable' are discouraged as they have other connotations.
Principle 3 – Reconcile the underlying profit figure to the statutory profit figure and present the adjustments in tabular form, with any accompanying explanation that may be necessary	The underlying profit figure should be reconciled to the statutory profit in a table that shows each significant adjustment (impacts net profit after tax by more than 5%), both gross and net of tax, and include explanatory notes. The reconciliation should be transparent, logical and justifiable.
Principle 4 – Present the underlying profit and accompanying explanation in the directors' report or other management discussion and analysis of the profit result	The underlying profit reconciliation should be clearly differentiated from the statutory profit by location (suggested location is Directors' Report) and should be made available in communications to shareholders and the wider investment community. The extent to which the underlying profit figure has been audited or reviewed should be disclosed. It should not be incorporated in or associated with IFRS-based financial statements.
Principle 5 – Include both positive and negative adjustments to the statutory profit figure	Companies should not 'window dress' their financial results and transparency requires both positive and negative adjustments to be included in the calculation.
Principle 6 – Maintain consistent adjustments to the statutory profit figure between reporting periods	The types of adjustments made should be consistent between reporting periods and comparative figures should be reported. To avoid the list of adjustments becoming too large, it is acceptable to discontinue reporting an item as an adjustment once it becomes 'insignificant' for the second consecutive year.

Table 3.1: Principles for reporting underlying profit (AICD and FINSIA) (continued)

Principle 7 – Disclose whether these principles have been relied on in reporting an underlying profit figure	AICD and FINSIA are not seeking to mandate the reporting of an underlying profit figure but where one is reported the company should state whether these principles have been applied in reporting of the figure. A statement to that effect should be included with the underlying profit table.

Source: Adapted from Underlying Profit: Principles for Reporting of Non-statutory Profit Information (AICD & FINSIA 2009)

Appendix 1 of the guidelines provides suggested potential adjustments that could be made to statutory profit to arrive at the underlying profit figure as well as an illustrative example of the tabular format suggested for use in identifying these adjustments. It is acknowledged that adjustments may vary from company to company and the listed items are considered to be 'appropriate' for inclusion. Suggested items to be included in adjustments are:

- Significant transactions or events which are not expected to be repeated consistently over a number of years;
- One-off provisions that are not expected to recur such as costs of redundancies or restructuring;
- Fair value adjustments from revaluing assets;
- Impairment losses;
- Income tax settlements that do not relate to the current year's profit;
- Defined benefit pension plans that need a 'top up'; and
- Revaluation of long-term liabilities (AICD & FINSIA 2009, pp. 20-22).

The guidelines issued by the AICD and FINSIA are not law or regulation but are simply guidelines on best practice that companies are encouraged to follow. There are no direct consequences for non-compliance with the guidelines. However, it is reasonable to expect, given the bodies involved and their membership, that the guidelines may have had an impact on the practice of reporting non-GAAP profits in Australia.

3.3.2 ASIC Regulatory Guide

The release of the AICD and FINSIA guidelines was followed in 2011 by the release of ASIC Regulatory Guide 230 on disclosure of non-IFRS (non-GAAP) financial information. ASIC,

Australia's corporate regulator, has the role of enforcing and regulating company and financial services law. ASIC is an independent Commonwealth Government body set up under the *Australian Securities and Investments Commission Act 2001* (Cth), and carries out most of its work under the *Corporations Act 2001*.

The *Australian Securities and Investments Commission Act 2001* requires ASIC to:

- Maintain, facilitate and improve the performance of the financial system and entities in it;
- Promote confident and informed participation by investors and consumers in the financial system;
- Administer the law effectively and with minimal procedural requirements;
- Enforce and give effect to the law;
- Receive, process and store, efficiently and quickly, information that it is given; and
- Make information about companies and other bodies available to the public as soon as practicable (ASIC 2012c).

ASIC issue a range of regulatory documents that explain its approach to specific areas it regulates. These include Consultation Papers which seek feedback from stakeholders on matters ASIC are considering, and Regulatory Guides which guide regulated entities by explaining how ASIC interprets the law. Regulatory Guides give practical guidance and describe the principles underlying ASIC's approach. They also explain when and how ASIC will exercise specific powers under legislation (ASIC 2007).

In March 2011, ASIC released Consultation Paper 150 *Disclosing financial information other than in accordance with accounting standards*. After receiving 33 responses to the Consultation Paper, ASIC released Regulatory Guide 230 *Disclosing non-IFRS financial information* and an accompanying Regulation Impact Statement in December 2011. The Regulatory Guide is aimed at directors and preparers of financial information and sets out ASIC's view on the use of financial information in financial reports and other corporate documents, such as annual reports, market announcements, briefing to analysts and prospectuses, where the information is presented other than in accordance with IFRS. The Guide uses the term 'non-IFRS financial information' to describe such information.

According to the Regulatory Guide 'the purpose of our guidance is to promote full and clear disclosure for investors and other users of financial information and minimise the possibility of those users being misled by such information' (ASIC 2011, p. 1).

The Guide deals with two types of non-IFRS financial information: non-IFRS profit information and pro forma financial information. Non-IFRS profit information is information concerning profits which have been calculated other than in accordance with IFRS, or using IFRS but adjusted in some manner. This type of information is the topic of this thesis and the term 'non-GAAP' is used in this study in line with other literature on the topic and also as the study includes some years before IFRS was introduced. Pro forma financial information is non-IFRS information used to show the effects of transactions for illustrative purposes in documents such as a prospectus or takeover document (pro forma financial information in prospectuses and takeover documents are beyond the scope of this study).

Whilst there is an acknowledgement that non-IFRS financial information can be useful for investors and other users in certain circumstances, the Regulatory Guide provides guidance on areas where non-IFRS financial information should not appear or be used. As far as financial reports are concerned, the guide states that non-IFRS financial information should not be included in financial statements in any way. Specifically, with regards to non-IFRS profit figures, the following guidelines are stipulated:

- Must not be included as a separate line item in the Income Statement or Statement of Comprehensive Income;
- Must not be included as a subtotal in the Income Statement or Statement of Comprehensive Income;
- Must not be included as additional columns; and
- Must not be included in a separate section below a financial statement or as a continuation of the statement to remove particular expenses to show a 'bottom line' non-IFRS profit (ASIC 2011).

ASIC's view is that these guidelines are in line with ss295(2) and 303(2) of the *Corporations Act* which specify that financial statements should follow accounting standards. Specifically, this part of the Regulatory Guide provides ASIC's interpretation of key sections of AASB101

Presentation of financial statements. However, as previously discussed in Section 3.2.2, AASB101 permits and requires additional line items in the Statement of Profit or Loss and Other Comprehensive Income. Companies use various additional line items in their Statement of Profit or Loss and Other Comprehensive Income such as earnings before interest, taxes, depreciation and amortisation (EBITDA) and it is unclear from the Regulatory Guide whether such items will no longer be allowed.

Under the guidelines, non-IFRS profit information may only be included in the notes to the statements in rare circumstances where it is needed to give a true and fair view of the financial performance or position of the entity under ss295(3)(c) and 303(3)(c) of the *Corporations Act*. In such circumstances, the Director's Report must give reasons for this opinion and the auditor must also form an opinion as to whether the additional information was necessary. In exceptional circumstances, ASIC may exercise its discretionary relief powers under ss340 and 341 of the *Corporations Act* to allow an entity to include non-IFRS financial information in financial reports. The guidelines also apply to concise financial reports prepared in accordance with s314 of the *Corporations Act*.

ASIC acknowledge that there may be times when extra information may be needed to help users better understand aspects of an entity's performance (ASIC 2011, p. 17). The guidelines therefore allow the presentation of non-IFRS financial information in documents other than the financial report, such as documents that accompany the financial report (e.g. Director's Reports), market announcements, presentations to investors and briefings to analysts. However, the information should follow the guidelines on presentation, inclusion and explanation so that it is not 'misleading' (ASIC 2011, p. 17). These include giving IFRS financial information equal or greater prominence, explaining non-IFRS information and reconciling it to IFRS results, calculating the information consistently from period to period and making sure the information is unbiased and has not been used to remove 'bad news'. There is a major emphasis on presentation of the non-IFRS information with recommendations contained in a detailed table. These guidelines on presentation in the Regulatory Guide suggest that ASIC consider the use of emphasis to be a disclosure tactic that should be addressed. Table 3.2 presents a summary of the presentation guidelines.

Table 3.2: Summary of guidelines for presenting non-IFRS information – ASIC Regulatory Guide 230

Guideline	Summary of Explanation
Prominence	IFRS financial information should be given equal or greater prominence, emphasis and authority than non-IFRS financial information. This includes factors such as order and manner of presentation and providing a similar level of attention to reconciling items between the figures. Examples of not giving equal or greater prominence include: • Only including commentary on non-IFRS profit information; • Only showing IFRS profits in a footnote; • Changing emphasis between figures from period to period to highlight most favourable result; and • Not presenting IFRS profit and reconciliation at least once in each document containing non-IFRS information.
Appropriate label	Non-IFRS financial information should be clearly labelled and distinguished from IFRS financial information (no particular label suggestions are made in the guide).
Calculation	Any calculation should be clearly explained.
Reconciliation	A reconciliation between IFRS and non-IFRS financial information should be provided. Significant adjustments should be separately itemised and explained.
Why information is useful	A clear, understandable and specific statement should be included explaining why the directors believe the non-IFRS financial information is useful.
Consistency	The approach and calculation should be consistent from period to period and, if not, an explanation of the change, with reasons, should be provided.
Adjustments	Any adjustments made to IFRS financial information should have corresponding adjustments in any comparative information.
Unbiased	The non-IFRS financial information should be unbiased and not used to avoid presenting 'bad news'.
One-off items	Items which have occurred in the past or are likely to occur again in the future should not be described as 'one-off' or 'non-recurring'.
Audited or reviewed	A clear statement as to whether the non-IFRS information has been audited or reviewed should be made.

Source: Adapted from *Regulatory Guide 230 – Disclosing non-IFRS financial information* (ASIC 2011)

It is important to note that ASIC administers, enforces and gives effect to the law – it is not a lawmaker. Regulatory Guides such as the one discussed above provide ASIC's interpretation of the law but are not actual law and do not have the force of law. They form part of a 'soft

regulation approach' adopted by ASIC which are seen as placing high expectations on codes, guidelines and policy statements (Kingsford Smith 2006, p. 466). Non-compliance may result in ASIC taking action which may begin with an educative letter but may end in court action (ASIC 2013b).

Both the AICD and FINSIA Guidelines and the ASIC Regulatory Guide concerning the use of non-GAAP profit figures do not prohibit the calculation and reporting of such figures. They do however provide guidance on the presentation of such figures including the provision of a reconciliation to the IFRS profit and the recommendation that the figure not be given undue prominence over the IFRS figure. It is therefore expected that these documents may not have affected the decision to report such figures but may have affected the use of impression management when reporting the figures.

ASIC conduct six-monthly reviews of financial reports to determine compliance with Regulatory Guides. Reports on the findings from these reviews are released each six months. A media release is also issued each six months to itemise the focus areas ASIC will be concentrating on in their reviews. In the years 2012, 2013 and 2014, the reporting of non-IFRS financial information was listed as an area of focus for ASIC in their review of financial reports (ASIC 2012a, 2012b, 2013a, 2013c, 2014a, 2014b). For each of these years, ASIC indicated that they contacted a small number of companies with the main concerns being:

- Giving prominence to non-IFRS financial information over IFRS;
- Disclosing non-IFRS figures in the financial statements;
- Using multiple non-IFRS measures in a confusing way;
- Failing to disclose a clear reconciliation;
- The use of the term 'extraordinary items';
- Describing items as 'one off' or 'non-recurring' even though they occur every year; and
- The application of the Guide in presenting information outside the financial report. (ASIC 2012a, 2012b, 2013a, 2013b, 2013c, 2014a, 2015a).

However, from 2015 to 2017 there was no mention of non-IFRS information in the documents concerning areas of focus (ASIC 2015a, 2015b, 2016a, 2016b, 2017a, 2017b, 2017c).

3.4 Industry Reports into Practice

Between 2009 and 2011, descriptive research into the practice of disclosing non-GAAP profit figures was undertaken by firms including Deloitte and KPMG. Research by Deloitte (Deloitte 2009) revealed that 68% of companies in the ASX top 100 reported a non-GAAP profit figure in their annual report in 2009. A similar study by KPMG (KPMG 2010b) revealed that in the same period, the number of companies in the ASX 100 reporting a non-GAAP profit figure in any medium (annual reports, profit announcements, press releases) was 84%. The Deloitte's survey revealed that of the companies reporting non-GAAP profit figures, only 21% actually reported a lower figure than the GAAP profit. In all other cases the non-GAAP profit figure was higher with 25% of companies actually converting a GAAP loss to a non-GAAP profit. The practice continued in 2011 (KPMG 2011) with results similar to past years in many respects. Eighty-two per cent of companies in the top 100 reported a non-GAAP profit figure. Of these, 73% reported a non-GAAP profit higher than the GAAP profit with 11% converting a loss into a profit.

A more recent, comprehensive report into non-GAAP disclosure in Australia was released by Chartered Accountants in November 2016 (Coulton et al. 2016). The study covered the years 2000-14 and shows a steady increase in the reporting of non-GAAP figures by the ASX500 companies in earnings announcements over that time, with a peak of 42% in 2014. The frequency of the provision of a reconciliation to GAAP also increased over the period with 91% of reporters of non-GAAP figures providing a reconciliation of some type in 2013.

Anticipating that the release of the ASIC released Regulatory Guide 230 *Disclosing non-IFRS financial information* would have an effect on the practice of reporting non-GAAP profit information, KPMG analysed disclosures made the year before the release and reported that several companies in the ASX top 100 would need to adapt their practices in order to comply (KPMG 2011). They noted that 41% of companies in the top 100 would need to start

providing justification for the inclusion of non-GAAP profit information and 98% would need to explicitly state if their non-GAAP profit had been audited or reviewed.

Whilst these descriptive studies are of interest and have served to highlight the prevalence of the practice in Australia, they did not attempt to investigate why companies reported these non-GAAP profit figures or if their reasons were justified. There were, and still are, major concerns with the reporting of these figures and the type of adjustments made to the GAAP profit figure. There is often a lack of consistency and comparability between different companies reporting such figures and also within particular companies from year to year. The 2010 study conducted by KPMG found that the majority of companies did not explain why they presented a non-GAAP measure of performance and some did not define the measure used or reconcile the figure to the statutory profit. It is hoped that the introduction of Regulatory Guide 230 by ASIC in 2011 went someway to addressing these concerns.

3.5 Summary

The current regulatory and institutional regimes that govern the reporting of profits, including non-GAAP profits, by Australian companies were discussed in this chapter. The *Corporations Law 2001* (Cth) in conjunction with AIFRSs provide regulation with regard to preparing financial reports. Guidelines from AICD and FINSIA and Regulatory Guide 230 from ASIC provide more specific guidance on how and where non-GAAP profits and other non-IFRS financial information should be reported.

In the next chapter, various theories used in extant literature to explain voluntary disclosure will be explored. Agency theory will be used to develop a theoretical framework and conceptual model to explain the motives for reporting non-GAAP profit figures, including the possibility of opportunistic behaviour. From this conceptual model, four research questions and sixteen hypotheses relating to the reporting of non-GAAP profit figures and the use of impression management tactics when reporting the figures will be formulated.

Chapter 4

Theoretical Framework and Development of Research Questions and Hypotheses

4.1 Introduction

This chapter will develop a theoretical framework and associated research questions and hypotheses for the current study. Several theories have been used to explain the use of voluntary disclosure by organisations and a brief discussion of these theories, along with their similarities and differences, is contained in Section 4.2. Due to the type of disclosure being investigated by this study and the disclosure's presumed purpose and presumed audience, agency theory is argued to be the most appropriate for use as a theoretical basis. This theory is described in more detail in Section 4.3. In Section 4.4, the concepts of agency theory are used to develop a conceptual model which is used to explain the phenomenon of reporting non-GAAP profit figures. The use of non-GAAP profit figures to provide incremental information is explored in Section 4.5 along with the development of the first two research questions and related hypotheses. Section 4.6 investigates the use of impression management in the reporting of non-GAAP profits and develops the second two research questions and related hypotheses. The chapter concludes with a summary in Section 4.7.

4.2 Theories Used in Voluntary Disclosure Studies

As evident in the literature, the use by organisations of various types of voluntary disclosure can be explained by a number of different theories. The theories differ with regard to the type of information being disclosed, the proposed reasons for disclosure and the particular audience involved. In order to explore this, and to assist in the development of a theoretical framework for the current study, an explanation of the relevant theories is required. Common theories used in previous literature concerning voluntary disclosure are briefly explained along with a discussion of the relationship between the theories.

4.2.1 Legitimacy Theory

Legitimacy theory is a systems-oriented theory predominantly used in research concerning social and environmental accounting and reporting. It is based on the concept that an organisation is assumed to be impacted by, and have an impact upon, the society in which it operates (Deegan 2002). Organisations wish to ensure their activities are perceived as legitimate with legitimacy defined as 'a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions' (Suchman 1995, p. 574). The theory revolves around the concept of a 'social contract' and gives consideration to societal expectations which can change over time (Deegan 2006). Organisations failing to comply with these expectations may face a threat to their legitimacy and in extreme cases, to their ongoing survival. Hence the theory suggests that voluntary disclosure may be used as a strategy by organisations in an attempt to gain, maintain or repair legitimacy.

4.2.2 Stakeholder Theory

Stakeholder theory is also a systems-oriented theory and is similar to legitimacy theory in that the organisation is seen as part of a broader social system, impacting on and being affected by others in society (Deegan 2002). However, while legitimacy theory considers the organisation's relationship with society as a whole, stakeholder theory considers the relationship between the organisation and particular identifiable groups of stakeholders (Rankin et al. 2012). The theory has two branches, the ethical or moral branch and the managerial branch.

The ethical branch relates to the ethical or moral treatment of the organisation's stakeholders. This is a normative branch of the theory which suggests that the organisation should be managed to benefit all stakeholders and that all stakeholders should be treated fairly (Hasnas 1998). The importance of stakeholders should not be determined by the resources they control and any one group should not be considered more important than other groups (Hasnas 1998). This branch of stakeholder theory suggests that all stakeholders have a right to be provided with information, including that which is voluntarily disclosed, and that this disclosure should be responsibility-driven (Gray, Owen & Adams 1996; O'Dwyer 2005).

The managerial branch seeks to explain how stakeholders may have influence on the actions of the organisation. Under this positive theory, different stakeholder groups are perceived to have different levels of power and influence in relation to the organisation and this is related to the control the particular group has over the resources required by the organisation (Ullmann 1985). Therefore, some stakeholder groups are perceived to be more important and it is proposed that it is more likely that the concerns of these groups will be addressed by the organisation. Under the managerial branch of stakeholder theory, it is suggested that voluntary disclosure of information is a strategic decision and is used to manage these more important stakeholder groups in order to meet their needs and expectations and to gain support and approval (Gray, Owen & Adams 1996).

4.2.3 Signalling Theory

Signalling theory has its roots in the labour market, where it was suggested that prospective employees signalled their superior qualities to employers by completing higher education (Spence 1973). The theory has been applied to other markets where information asymmetry between two parties is present (Connelly et al. 2011; Morris 1987). It proposes that information asymmetry is reduced when one party, with more information, signals the information to the party or parties with less information (Morris 1987). Sellers in a market (e.g. employees looking for jobs, companies floating shares, retail outlets selling goods) are assumed to have more information than buyers, and if buyers have no information they may value all products the same. Sellers of high quality products may incur an opportunity loss and therefore have incentive to 'signal' or communicate their product's superior quality to buyers, thereby increasing the price of their product (Watson, Shrives & Marston 2002). The signal must be confirmable and not easily copied by poor quality sellers (Morris 1987). Signals may be in the form of tangible actions such as the consistent, long-term payment of dividends, the obtaining of a particular certification or accreditation, or the provision of generous product warranties (Connelly et al. 2011; Cotter, Lokman & Najah 2011; Morris 1987). However, to be effective, signalling of this type should also be enhanced by using a variety of different signals (Connelly et al. 2011). The use of voluntary disclosure to communicate and reinforce tangible actions is one such signal (Cotter, Lokman & Najah 2011) and signalling theory has been used to explain the voluntary disclosure of various types of information including accounting ratios (Watson, Shrives & Marston 2002), auditor's

internal control reports (Bin & Jing 2009), and management earnings forecasts in prospectuses (Jog & McConomy 2003). The signal must be credible and management who attempt to falsely signal high quality run the risk that when the true quality of the firm is revealed, no subsequent disclosures will be seen as credible (Watson, Shrives & Marston 2002).

4.2.4 Agency Theory

Agency theory concerns the delegation of control in organisations and focuses on agency relationships where one party (the principal) delegates the authority to make decisions to another party (the agent) (Jensen & Meckling 1976). In a corporate setting the shareholders (owners) are usually considered to be the principal and the management of the company is considered the agent. This separation of the decision making and control functions between owners and managers may produce conflicts, particularly if individuals act in their own self-interest (Morris 1987). These conflicts, known as agency conflicts, are exacerbated by the fact that, because of their position in the organisation, managers have access to information not available to owners (information asymmetry) (Eisenhardt 1989). Management may use this information to undertake actions beneficial to themselves rather than the owners. It is assumed that principals are aware of these potential conflicts and will introduce bonding and monitoring measures to control or mitigate agency conflict and to overcome information asymmetry (Fama & Jensen 1983a). The theory suggests that the agents will ultimately bear some of these costs and managers therefore have incentive to decrease the amount of information asymmetry (Fama 1980; Jensen & Meckling 1976). Some information asymmetry is overcome by mandatory disclosures such as regulated financial statements prepared under IFRS. However, voluntary disclosure also plays an important role in assisting management demonstrate to shareholders that they are acting in their best interests (Watson, Shrives & Marston 2002).

4.2.5 The Relationship Between the Theories

The theories discussed above have similarities. All the theories have been used in extant literature to explain the use of voluntary disclosures of different types of information by organisations. Depending on the theory involved, voluntary disclosure may be used to reduce

information asymmetry (agency and signaling theory), to discharge accountability (stakeholder theory) or to signal legitimacy (legitimacy theory) or quality (signaling theory) (An, Davey & Eggleton 2011). The existence of information asymmetry is an implicit feature of agency theory as it is one of the conditions that leads to agency conflicts. Similarly, information asymmetry is a feature of signaling theory as without it there would be no need to send a signal (Morris 1987).

The theories also differ in certain regards. Firstly, they differ in the presumed audience or users of voluntary disclosures, which may be defined quite narrowly as shareholders (agency theory), or in a much broader sense to include all stakeholders and even society as a whole (stakeholder and legitimacy theory) (Brennan & Merkl-Davies 2013). The theory adopted therefore affects and determines the focus of analysis. Secondly, the theories differ in the type of disclosure they have been used to explain and the incentives influencing disclosure (Cotter, Lokman & Najah 2011). Legitimacy and stakeholder theory are most commonly used to explain the voluntary disclosure of non-financial information by organisations, such as corporate governance information and social and environment reporting (Cotter, Lokman & Najah 2011). Social and political factors are seen as the determinants of voluntary disclosure behavior with firms attempting to respond to these factors or to legitimise their actions. In contrast, agency and signaling theory have been used to explain the voluntary disclosure of various types of information, often with a stronger emphasis on financial information. Wealth maximisation is seen as a major factor affecting disclosure behaviour in these theories (Cotter, Lokman & Najah 2011). Agency and signaling theories differ in the use of the concept of 'quality'. Signaling theory assumes firms with higher quality products will signal to the market and that the signal will be difficult for others to copy. Agency theory does not involve this concept of 'quality' concerning voluntary disclosures (Morris 1987).

The theories discussed above seek to explain the use of voluntary disclosure of information. However, only agency theory and signaling theory emphasise the reduction of information asymmetry as the main purpose of this disclosure. This study concerns the reporting of non-GAAP profit figures by Australian companies and is therefore concerned with the voluntary disclosure of financial information. As previously discussed, the two schools of thought that attempt to explain this disclosure state the existence of information asymmetry as a major

incentive for the disclosure. The presumed organisational audience for the reporting of these figures is also narrowly defined as shareholders and prospective investors and not a broader range of stakeholders or society at large (as in stakeholder and legitimacy theory). Again, agency theory focuses on this narrowly defined audience compared to wider systems-oriented theories (Brennan & Merkl-Davies 2013). Therefore, this research utilises agency theory to develop a theoretical framework and conceptual model to guide this study.

Although information asymmetry and opportunistic versus incremental information motives are usually briefly discussed, extant literature on non-GAAP profits has often been silent as to an actual theoretical basis, with many studies not expressly expounding any particular theory (e.g. Bhattacharya et al. 2004; Bowen, Davis & Matsumoto 2005; Cameron, Percy & Stevenson-Clarke 2012; Entwistle, Feltham & Mbagwu 2004, 2006a; Johnson & Schwartz 2005; Marques 2010). Previous literature on non-GAAP earnings that has identified a theory has overwhelmingly used agency theory to explain the reporting of the figures (e.g. Frankel, McVay & Soliman 2011; García Osma & Guillamón-Saorín 2011; Isidro & Marques 2013; Malone, Tarca & Wee 2016). By using agency theory, this study concurs with prior literature on the topic. The theory is explored in more detail in the next section.

4.3 Agency Theory

Agency theory is primarily concerned with organisations where owners (principal) are separate from, and therefore have to delegate control for decision making to, management (agent) (Jensen & Meckling 1976). In public companies, for example, management is responsible for formulating and implementing strategies while shareholders contribute capital and are willing to bear the risk of losses (Fama & Jensen 1983a; Jensen & Meckling 1976).

Agency theory assumes that all actions of rational individuals are driven by self-interest and are undertaken in an attempt to maximise the individual's own wealth. Conflicts arise because the interests of the two parties (agent and principal) may not be aligned (Eisenhardt 1989; Kiser 1999). Managers who initiate and implement decisions in the firm are the agents in the agency relationship and 'do not bear a major share of the wealth effects of their decisions' (Fama & Jensen 1983b, p. 304). Therefore, managers may use their position to

further their own interests rather than the interests of the owners (Jensen & Meckling 1976). It may also be difficult and expensive for principals to verify what the agent is doing (Eisenhardt 1989). This creates agency problems which are exacerbated by the time horizon problem, differential risk aversion and dividend retention (Lambert 2001; Lewellen, Loderer & Martin 1987; Smith & Watts 1982).

4.3.1 Agency Problems

The time horizon problem relates to the differing time horizons used by the agents and principals when making decisions. Shareholders generally have longer time horizons, valuing long-term growth and increased firm value. They are interested in managers making decisions to enhance future cash flows. Managers on the other hand are generally more short-term focused, particularly if they do not expect to be employed long term by the firm or they are about to retire (Lambert 2001; Smith & Watts 1982). If a career move is being considered, for example, the manager may wish to look effective by achieving good profits and may employ tactics such as earnings management or delaying the incurring of some expenses.

Differential risk aversion is a problem where managers are assumed to prefer less risk than shareholders, who are generally considered to be risk neutral (Belghitar & Clark 2015; Eisenhardt 1989; Kiser 1999; Wright, Mukherji & Kroll 2001). This is due to shareholders usually having diversified investments and therefore being able to bear more risk in one single investment (Fama 1980). Shareholders may also have other sources of income such as salaries and wages and are not as reliant on the income from a single investment. Most importantly, shareholders have limited liability. Managers on the other hand have a large investment in the firm in the form of human capital (Fama 1980). Their perceived expertise, reputation and their job security may be at stake. Unlike shareholders, managers cannot diversify risk easily and this leads to a different level of risk aversion between the two parties (Eisenhardt 1989). Differential risk aversion can lead to inappropriate investment decisions where, for example, good investment proposals which carry more risk may be rejected by management who, under agency theory, are considered more risk averse (Belghitar & Clark 2015).

The issue of dividend retention involves managers wanting to keep funds in the firm in order to have more resources under their control to expand the firm and to pay their own salaries, whereas shareholders want more funds paid out as dividends (Jensen 1986).

Agency problems are exacerbated by the presence of information asymmetry (Eisenhardt 1989; Gomez-Mejia, Wiseman & Dykes 2005). Due to their position in the organisation, managers have access to information not available to owners. This may further enable management to act opportunistically and undertake actions beneficial to themselves rather than the owners. Opportunistic behaviour on the part of management acting as the agent may include:

- Excessive perquisites, where the agent makes unnecessary or excessive expenditure on items such as company cars and expense accounts;
- Empire building, where the agent may expand the firm or a part of the firm under the agent's control beyond a point where the wealth of the principal is maximised; and
- Shirking, where the agent does not work hard or finds ways to reduce workload (Jensen & Meckling 1976). This is termed moral hazard which refers to a lack of effort on behalf of the agent (Eisenhardt 1989).

4.3.2 Agency Costs

Under agency theory, it is assumed that principals are aware of agency problems and will take actions to control or mitigate agency conflict (Fama & Jensen 1983a; Smith & Warner 1979). Introducing these measures involves three types of agency costs, which are the costs of monitoring and bonding managers so that they pursue the shareholders' interests, and the residual loss which constitutes any remaining costs (Fama & Jensen 1983b; Jensen & Meckling 1976).

Monitoring costs are incurred to monitor the agent's behaviour in order to align that behaviour with the interests of the principal. They consist of expenditure aimed at measuring, observing and controlling the agent's behaviour. Examples of monitoring costs include auditing costs, the instigation of operating rules and control systems, budget restrictions and appointing independent directors on the board (Cotter, Lokman & Najah 2011; Fama 1980;

Jensen & Meckling 1976; Morris 1987). In the first instance, monitoring costs are incurred by the principal. However, as the costs increase they are passed on to the agent (manager) in the form of reduced remuneration. This is known as price protection. Managers who perform well may require less monitoring and will therefore be remunerated well. However, poor performers will require more monitoring and their remuneration will be reduced accordingly.

Under agency theory, price protection ensures that agents ultimately bear the costs of monitoring in the form of reduced remuneration. Agents are therefore assumed to have an incentive to enter into contractual arrangements to act in the best interests of the principals and to reduce their ability to act opportunistically (Jensen & Meckling 1976). The costs of entering into such contracts and/or of providing extra information are known as bonding costs. Bonding costs are costs incurred by the agent to bond him/herself to the principal. Examples of bonding costs include the costs of preparing more frequent financial reports (e.g. quarterly reports), linking management remuneration payments to performance (based on profits or share price) and offering managers a share of equity so that their interests are aligned (Smith & Watts 1982). Accounting information therefore plays an integral role in much of the monitoring and bonding mechanisms as it is used to design contracts and monitor performance. It is predicted that agents will attempt to provide extra information to show they are working for the benefit of the principals to avoid high monitoring costs and receive higher remuneration. Some researchers have argued that non-GAAP profit figures are more informative than GAAP profit figures and therefore enable shareholders to better evaluate performance (Bhattacharya et al. 2003; Bradshaw & Sloan 2002; Entwistle, Feltham & Mbagwu 2004, 2010; Venter, Emanuel & Cahan 2014). The costs of preparing such figures could therefore be considered a bonding cost as they provide extra information on the performance of the company to the principal in the agency relationship.

As discussed above, devices such as management bonus plans linked to profits and managerial ownership of equity, bond the interests of managers to those of the owners. Linking executive remuneration to profits or share price and providing management with shares in the entity can have an effect on the problems raised by different time horizons, differential risk aversion and dividend retention (Belghitar & Clark 2015; Smith & Watts 1982). The horizon problem may be partly overcome by linking remuneration to long-term

performance, e.g. share price, or by issuing managers with equity in the firm, thereby aligning their interests more with those of the shareholders. However, share based compensation does not usually resolve the risk aversion problem as it ties the manager's income even more to the one organisation (Smith & Watts 1982). Paying bonuses based on profits may help with the risk aversion problem as it encourages more risky choices in order to increase profits. Managerial ownership of the firm's equity may help reduce the dividend retention issue as the managers will also get any dividends they approve.

Despite the use of monitoring and bonding strategies, agency theory predicts that an optimum amount of monitoring and bonding will be reached, and residual agency costs will remain (Fama & Jensen 1983a; Jensen 1983; Jensen & Meckling 1976). This is because costs will only be incurred to the extent that marginal costs equal marginal benefits and therefore the interests of the principal and the agent may still not be perfectly aligned. These residual agency costs are known as the residual loss and represent the opportunistic behaviour unable to be eliminated by monitoring and bonding. Agents may perceive that they will not be fully penalised for behaviour that is contrary to the interests of the principals and may therefore have incentives to engage in opportunistic behaviour which increases the residual loss. The residual loss is borne by both the principal and the agent.

4.3.3 Criticisms and Extensions of Agency Theory

Some researchers have criticised agency theory for being narrowly conceived, namely the emphasis placed on the contract between principal and agent and the attempt by the principal to make this more efficient (Eisenhardt 1989; Kiser 1999). Critics of the theory have argued that the social and institutional context surrounding the agency relationship is ignored in this narrow setting (Wiseman, Cuevas-Rodríguez & Gomez-Mejia 2012). The assumption that individuals will only ever act in their own self-interest is also challenged by some authors. Wright, Mukherji and Kroll (2001, p. 414) for example, argue that the theory does not reflect all contingencies that may be present in an economic relationship; particularly that 'diverse individuals in various situations may behave differently'. However, others have challenged this criticism and argued that even if the assumption of unmitigated self-interest is relaxed,

the theory still provides an effective tool to analyse situations involving agency relationships (Jensen 1994; Wiseman, Cuevas-Rodríguez & Gomez-Mejia 2012).

Jensen (1994) has defended the assumption of self-interest and the use of incentives postulated by the theory. While acknowledging that there are many factors that influence behaviour, including altruism, Jensen argues that none of these turn people into 'perfect agents' and that rational individuals, although perhaps not acting entirely through self-interest, will still usually choose options that are in their interests or make them better off. Ultimately, he proposes that 'rational self-interested people involved in cooperative endeavours *always* have incentives to reduce or control conflicts of interest so as to reduce the losses resulting from them' (Jensen 1994, p. 45). Wiseman, Cuevas-Rodríguez and Gomez-Mejia (2012, p. 202) also defend the use of the theory, stating that its

> flexibility allows for its application to a variety of non-traditional settings where the key elements of agency theory, such as self-interest, information asymmetry, and the mechanisms used to control agency costs can vary beyond the narrow assumptions implied in traditional agency-based research.

They propose that conflicts between agents and principals are always a possibility due to contrasting views about desired outcomes and that the theory only requires there to be the potential for differences in interests to be applicable. This is particularly so as information asymmetry means it is often difficult for principals to know when the agent's interests differ from theirs.

In their development of a conceptual framework of impression management, Merkl-Davies and Brennan (2011) discuss the predominant use of agency theory in research concerning the topic. They argue that the motivation to manipulate the presentation and disclosure of certain voluntarily disclosed information, that is to use impression management tactics, is not always easily explained using the economic-based perspectives of agency theory. However, they do acknowledge that for research focusing on information asymmetry and possible reporting bias concerning financial performance, and on the relationship between managers and investors, agency theory provides a particular view of impression management. This study focuses on the voluntary disclosure of non-GAAP profit figures and the use of impression

management in the course of this disclosure. As the figures relate to the financial performance of a company, an agency theory model is adopted and is discussed below.

4.4 The Voluntary Disclosure of Non-GAAP Profits – a Conceptual Model

In this section, agency theory will be used to develop a conceptual model to illustrate how this theory relates to the reporting of non-GAAP profit figures and the potential for opportunistic reporting of such figures. Agency conflicts and information asymmetry between agents and principals provide incentives for the agents to act in a manner that is contrary to the interests of the principal. However, monitoring costs, which are ultimately borne by the agent, encourage agents to bond with the principal and reduce agency problems. It is acknowledged that not all agency costs can be eliminated by monitoring and bonding and a residual loss will remain. With this in mind, research using agency theory has often taken either an efficiency perspective or an opportunistic perspective (Jensen & Meckling 1976; Watts & Zimmerman 1978).

The efficiency perspective maintains that if contracts used to bond agents are efficient, the interests of agents and principals will be aligned and any actions that benefit the agent will also benefit the principal and increase firm value (Fama 1980). Taking a long-term view, this approach argues that agents recognise that any opportunistic behaviour will be penalised by future settling up (Godfrey et al. 2006). The efficiency perspective is termed *ex ante* (before the fact) as agents behave as if certain mechanisms were in place from the beginning (e.g. as if contracts had been negotiated at the start) to limit their behaviour. Managers are therefore more likely to report the firm's underlying economic circumstances as accurately as possible as this keeps the shareholders (principals) informed, reduces monitoring costs and enhances the manager's reputation. The first school of thought proposed by previous literature on non-GAAP profits has argued that this is the motive for reporting such profit figures, to provide incremental, value-relevant information not evident from reviewing the financial statements prepared under IFRS or GAAP (Black et al. 2012; Brown & Sivakumar 2003; Entwistle, Feltham & Mbagwu 2004, 2010; Heitger & Ballou 2003). Proponents of the incremental information school of thought argue managers provide these discretionary earnings figures to overcome information asymmetry and lower the cost of capital (Baginski, Hassell & Hillison

2000) and thereby bond management to shareholders. The reporting of such figures can therefore be viewed as a bonding cost under agency theory.

Other research has argued that incentives to act in one's own best interest are still present and that agents will still behave opportunistically while attempting to bond themselves to the principals, as the effect of any residual loss means monitoring and bonding mechanisms are incomplete (Fama & Jensen 1983a; Jensen 1983; Jensen & Meckling 1976). This approach is termed the *ex post* (after the fact) approach. Contractual arrangements are taken as given and *ex post*, or after the contracts are in place, agents have incentives to transfer wealth as the contracts are unlikely to completely remove any benefits they could derive from opportunistic behaviour (Fama 1980; Godfrey et al. 2006). The use of impression management tactics to highlight certain information, which could potentially mislead some users, is a form of opportunistic behaviour (Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011). Companies that engage in impression management tactics when reporting non-GAAP profit figures may be calculating and/or emphasising figures that do not fully and transparently reflect the firm's financial situation. This may affect the ability of shareholders and potential investors to make financial decisions and could be considered an agency cost (Davidson et al. 2004; García Osma & Guillamón-Saorín 2011). Due to the effect of any residual loss from the resulting shortfall in monitoring and bonding activities, shareholders and prospective investors may be misled by, and make non-optimal decisions based on, these figures. The use of impression management is therefore a manifestation of the agency problem.

Some studies have suggested that these two motives for reporting non-GAAP figures, incremental information versus opportunistic behaviour, are mutually exclusive (Merkl-Davies & Brennan 2007). However, others have suggested that it is likely both motives co-exist and that a company may wish to provide some incremental information but may also use impression management tactics to highlight and emphasise a particular figure (e.g. Entwistle, Feltham & Mbagwu 2006b; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Libby & Emett 2014; Young 2014). As Young (2014, p. 451) points out, 'informative reporting and strategic disclosure do not represent mutually exclusive explanations. Instead, both motives likely co-exist with the particular driver varying across

firms and time conditional on prevailing reporting incentives'. Non-GAAP earnings may be calculated and reported as a bonding mechanism by management, but the effect of any residual loss may also mean the figures and their presentation can be manipulated in order to control perceptions and potentially mislead users. Drawing from this reasoning, a conceptual model has been developed and is shown in Figure 4.1 below. This model introduces four research questions which will be formulated, along with sixteen related hypotheses, in the remainder of the chapter.

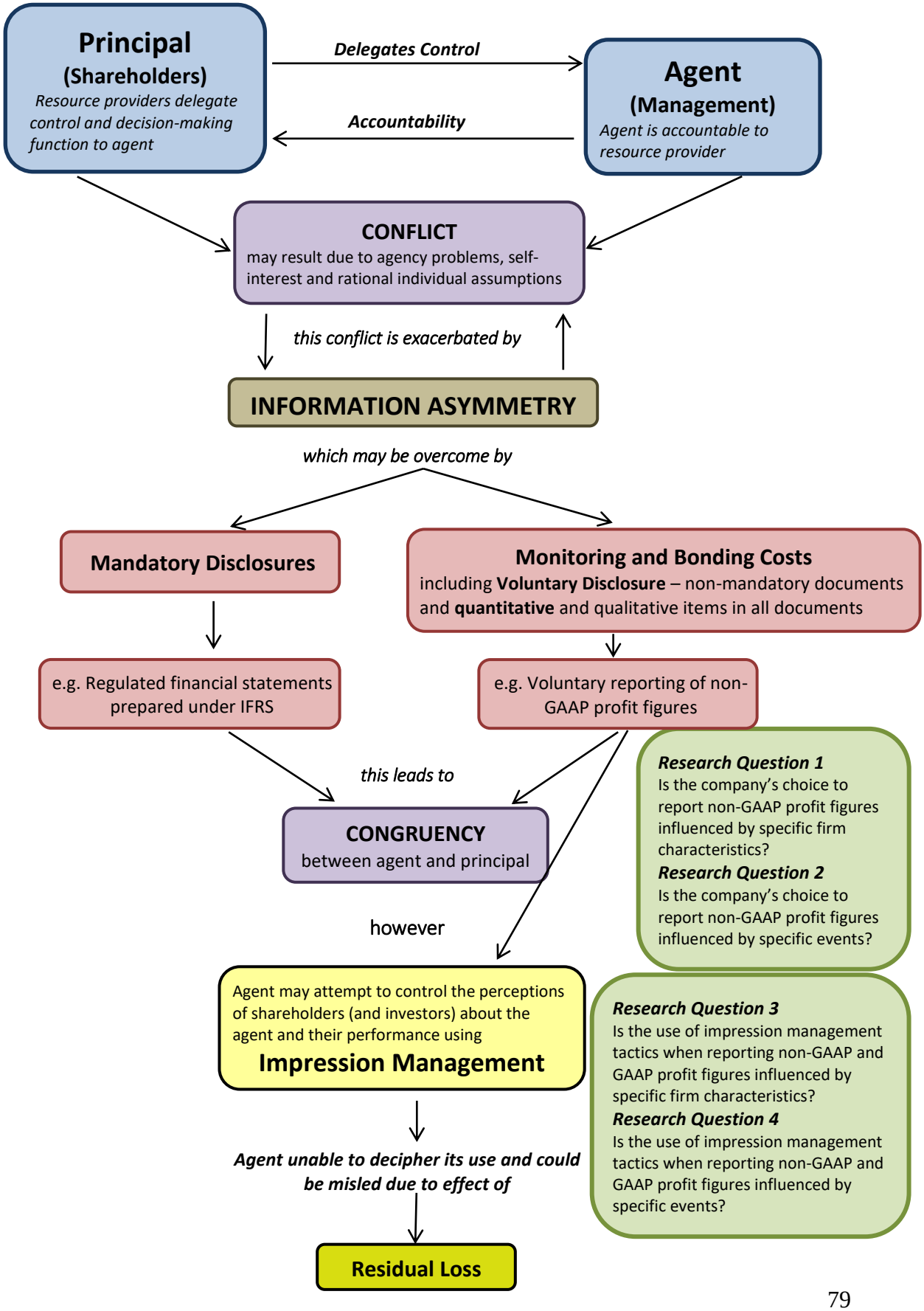
4.5 Non-GAAP Figures and Incremental Information

Management may voluntarily report non-GAAP figures in order to bond themselves to shareholders and prior research has found that non-GAAP figures can provide information that is relevant to shareholders and investors (e.g. Bhattacharya et al. 2003; Bradshaw & Sloan 2002). The idea that these additional profit figures provide useful information is supported in Australia by some professional bodies with guidelines from AICD and FINSIA (discussed in Chapter 3) stating that the bodies 'believe that the market is assisted by the additional reporting of an underlying profit figure' (AICD & FINSIA 2009, p. 15). Regulatory Guide 230 from ASIC takes a more tempered view but still acknowledges that 'there are cases where non-IFRS financial information in documents . . . . . is necessary or useful to investors and other users of information' (ASIC 2011, p. 17). Despite this, not all firms report such figures. Taking a broad approach to the topic of non-GAAP profit figures, the first two research questions investigate what factors may influence a company's decision to calculate and report these figures. Research Question 1 relates to specific firm characteristics:

> ***Research Question 1: Is the company's choice to report non-GAAP profit figures influenced by specific firm characteristics?***

To assess this research question, four hypotheses are developed that relate to specific firm characteristics which may influence a company's choice to report additional voluntary financial information, in this instance non-GAAP profit figures. Agency theory and the concept of bonding costs will be used to develop predictions as to how these characteristics

Figure 4.1: Conceptual model



will affect the choice to report such a figure. The particular firm characteristics that will be investigated are size, ownership concentration, leverage and good/bad news firms.

4.5.1 Size

The size of the firm may exacerbate the effects of the separation of ownership and control with larger firms, with a greater proportion of outside capital, having greater agency costs and information asymmetry (Jensen & Meckling 1976). Larger firms are likely to be more complex and have a wider ownership base than small firms (Fama & Jensen 1983b; Meek, Roberts & Gray 1995). They are also likely to have less monitoring potential from concentrated share ownership since shareholders need to own a larger market value of shares to have influence in a larger company compared to smaller companies. Indeed, Jensen and Meckling (1976, p. 348) hypothesised that 'the larger the firm becomes the larger are the total agency costs because it is likely that the monitoring function is inherently more difficult and expensive in a larger organization'. If the monitoring function is more difficult in larger firms, management may choose to provide more disclosure to mitigate information asymmetry and inform investors. The cost of providing this information, which includes the calculation and disclosure of non-GAAP profit figures, would be considered a bonding cost.

Previous studies concerning voluntary disclosure in general have overwhelmingly found that the size of a company is significantly positively related to the amount of voluntary disclosure in the annual report (Ahmed & Courtis 1999; Boesso & Kumar 2007; Chow & Wong-Boren 1987; Hossain, Perera & Rahman 1995; Lang & Lundholm 1993; Meek, Roberts & Gray 1995). It has been proposed that larger firms are better able to bear the direct costs of voluntary disclosure and are therefore more likely to disclose more information than smaller firms (Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995). However, the majority of studies into non-GAAP profit figures have not investigated the effects of firm characteristics such as size on disclosure. Any measure for size has generally been used as a control variable only. A few of these studies have reported results on the variable and have found that larger firms are more likely to report non-GAAP profit figures (Johnson & Schwartz 2005; Malone, Tarca & Wee 2016; Marques 2010). It is therefore predicted that

larger firms are more likely to report non-GAAP profit figures than smaller firms with the first hypothesis stating:

Hypothesis 1:

Larger companies are more likely to report non-GAAP profit figures than smaller companies.

4.5.2 Ownership Concentration

From an agency theory perspective, larger shareholders, including institutional investors, have more incentive and are better able to monitor and influence management compared to those with small shareholdings. When share ownership is more dispersed, there are a greater percentage of small shareholdings and these shareholders have less power or influence to demand information. Therefore, information asymmetry is higher, and these shareholders in particular may need more information provided to them by management. It is therefore predicted that companies with more dispersed ownership are more likely to report a non-GAAP profit figure in an attempt to overcome information asymmetry and to bond themselves to shareholders. Thus, the second hypothesis is developed as follows:

Hypothesis 2:

> *Companies with dispersed ownership are more likely to report non-GAAP profit figures than companies with concentrated ownership.*

4.5.3 Leverage

Extant agency theory literature suggests that debt can be useful in reducing agency conflicts because it bonds the firm to make regular payments thereby reducing the amount of free cash flow available for managers to invest in low-return projects or to engage in self-interest activities (Bathala, Moon & Rao 1994; Jensen 1986; Lasfer 1995). Increased debt can also provide incentive for managers to work harder and make better investment decisions (Grossman & Hart 1982; Lasfer 1995). However, debt can exacerbate the conflict between shareholders and debtholders as higher debt and the presence of debt covenants can reduce returns to shareholders and lead to higher risk of bankruptcy (Hodgson & Stevenson-Clarke 2000; Jensen 1986; Lasfer 1995; Smith & Warner 1979). Management of highly leveraged firms may therefore wish to provide extra information on profits as shareholders and

investors may perceive earnings to be less informative due to increased risk that comes with higher levels of leverage (Lougee & Marquardt 2004).

Previous studies into voluntary disclosure in general have reached conflicting conclusions concerning the effects of leverage on the amount of disclosure (e.g. Ahmed & Courtis 1999; Chow & Wong-Boren 1987; Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995). Studies specifically about the reporting of non-GAAP or other earnings figures have generally used leverage only as a control variable (e.g. Guillamon-Saorin, Garcia Osma & Jones 2012; Heflin & Hsu 2008). Studies that reported the results for leverage found that more highly leveraged firms were more likely to report a non-GAAP figure (the significance was weak in the study by Lougee and Marquardt (2004)) (Bhattacharya et al. 2004; Lougee & Marquardt 2004). Wong and Wong (2010) looked at firms reporting EBIT in New Zealand and found those that were highly leveraged were more likely to disclose the figure. The argument presented above using agency theory predicts that companies which are more highly leveraged are more likely to report non-GAAP profit figures in order to bond themselves to shareholders and allay any concerns shareholders may have about the high leverage. Accordingly, the third hypothesis is developed as follows:

Hypothesis 3:

> *Highly leveraged companies are more likely to report non-GAAP profit figures than lower leveraged companies.*

4.5.4 Good/bad News Firms

Under agency theory, one mechanism to overcome information asymmetry involves principals monitoring agent's performance. The agents (or management) will in turn enter into contracts and provide extra information in an attempt to bond themselves to the principal (or shareholders) and reduce agency costs. Companies that have bad news to report, for example a drop in GAAP profits from the previous period or a GAAP loss, may be more likely to report an alternative non-GAAP profit figure particularly if the drop was because of extraordinary, one-off items. In this situation, management may attempt to provide this extra information to show they are working for the benefit of the principals so as to avoid high monitoring costs and receive higher remuneration. Previous studies have confirmed this assumption with less profitable firms, firms that have reported a decrease in GAAP earnings

and firms that have missed analysts' forecasts, being more likely to report non-GAAP figures (Bhattacharya et al. 2004; Entwistle, Feltham & Mbagwu 2004; Isidro & Marques 2015; Johnson & Schwartz 2005; Lougee & Marquardt 2004). Entwistle, Feltham and Mbagwu (2004), for example, found that strong performers, firms with record GAAP earnings and firms meeting analysts' forecasts were less likely to report a non-GAAP figure. Bhattacharya et al. (2004) found that firms reporting non-GAAP profits were significantly less profitable than the median for firms in their industry. It is therefore predicted that companies reporting a drop in GAAP profits from the previous period, or a GAAP loss, are more likely to report a non-GAAP profit figure. The fourth hypothesis is developed as follows:

Hypothesis 4:

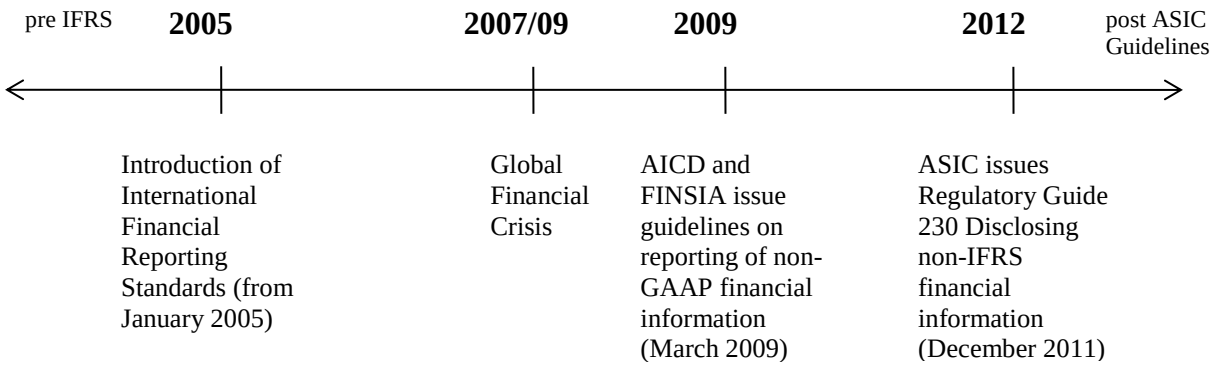
> *Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to report non-GAAP profit figures than companies reporting an increase in GAAP profits.*

Apart from firm characteristics it is also possible that particular events may influence or drive a firm's decision to report non-GAAP profit figures as the events may exacerbate the information asymmetry between principles and agents. Research Question 2 concerns the effect specific events may have had on this decision:

Research Question 2: Is the company's choice to report non-GAAP profit figures influenced by specific events?

To assess this research question, four hypotheses are developed that relate to specific events which may have influenced a company's choice to report additional voluntary financial information, in this instance non-GAAP profit figures. This research question (and Research Question 4) concerns the effect certain specific events may have had on the decision to report non-GAAP profit figures and the use of impression management when reporting such figures. These specific events are the introduction of IFRSs in Australia, the GFC, the release of the AICD and FINSIA guidelines and the release of the ASIC Regulatory Guide. These events are shown on the timeline presented in Figure 4.2 below.

Figure 4.2: Sample Period Timeline – specific events that may influence disclosure decisions



The introduction of IFRSs in Australia, the release of the AICD and FINSIA guidelines and the release of the ASIC Regulatory Guide were previously discussed in detail in Sections 3.2 and 3.3.

4.5.5 The Introduction of IFRS in Australia

Australia adopted IFRS effective from annual reporting periods commencing on or after 1 January 2005, with Australian listed entities required to comply with the Australian equivalents to IFRS from this date (Australian Accounting Standards Board 2004a). Therefore, companies with a year-end of 31 December would fully implement the standards in the 2005 report. For companies with a year-end other than 31 December, the year 2005 was a transition year and the 2005 annual report was still prepared under the previous regime. However, companies were to provide certain disclosures concerning the effect of IFRS adoption as mandated by AASB 1047 *Disclosing the Impacts of Adopting Australian Equivalents to International Financial Reporting Standards* (Australian Accounting Standards Board 2004b). According to this standard '(t)he manner of presentation of quantified financial information about the impacts of adopting Australian equivalents to IFRSs is not specific in this Standard and is a matter for the entity to determine' (Australian Accounting Standards Board 2004b, p. 9) which implies companies were given 'considerable discretion' in complying with the requirements of the standard (Gallery, Cooper & Sweeting 2008, p. 257).

The standard predicted that adopting IFRS 'may result in changes to accounting policies that have significant impacts on the reported financial position and financial performance of an entity' (Australian Accounting Standards Board 2004b, p. 6). As discussed in Section 3.2.2, it was expected that there would be significant changes to the way companies accounted for goodwill, intangible assets, non-current assets (impairment testing), share-based payments, taxation and financial instruments (Chalmers, Clinch & Godfrey 2011; Cotter, Tarca & Wee 2012) and therefore the introduction of the standards would have a major impact on financial statements including the income statement (AICD & FINSIA 2009). The adoption of IFRS was expected to have significant effects on reported net profit and shareholders' equity and it is likely management would have known about these effects before investors and shareholders (Wang & Welker 2011). Information asymmetry caused by the introduction of IFRS and the calculation of financial results using the standards would therefore have been high in the transition and adoption years and this would have been incentive for managers to provide extra disclosure concerning its effect (Gallery, Cooper & Sweeting 2008). Due to the notable differences between existing Australian Accounting Standards and IFRS, companies may have felt the need to adopt different ways of expressing earnings and profits (Deloitte 2009). It is predicted that the number of companies reporting a non-GAAP profit figure increased with the introduction of IFRS with the fifth hypothesis developed as follows:

Hypothesis 5:

> *The number of companies reporting non-GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.*

4.5.6 The Global Financial Crisis (GFC)

The usefulness of non-GAAP figures could potentially increase during times of economic crises when markets and asset prices used in fair value accounting are more volatile (Malone, Tarca & Wee 2016; Sinnewe, Harrison & Wijeweera 2017). The GFC, along with the resulting drop in GAAP profits for many companies, may have prompted managers to provide extra information concerning the economic downturn and its effect on their results. The first signs of the crisis emerged in the middle of 2007 (Reserve Bank of Australia 2010). The crisis intensified around March 2008 and reached a peak in September 2008, with conditions improving over the course of 2009 (Reserve Bank of Australia 2010). An Australian study by Malone, Tarca and Wee (2016) investigated the disclosure of non-GAAP

earnings adjustments for fair value measurements around the time of the GFC. They found that the release of non-GAAP figures was less likely in the pre-crisis period compared to the crisis period, consistent with companies making more use of non-GAAP earnings in the volatile crisis period. They argue that companies may have reported a non-GAAP figure due to the many asset write-downs during the crisis that were not expected to recur in the future with companies therefore wanting to report a figure more reflective of earnings without these write-downs. In another Australian study Sinnewe, Harrison and Wijeweera (2017) considered whether non-GAAP earnings contain statistically significant information on future cash flow predictability before, during and after the GFC. They found that non-GAAP earnings did provide important information on future cash flows but only in the pre-crisis and crisis period. These findings suggest that companies did increase the use of non-GAAP earnings during the GFC, possibly in an attempt to provide more value relevant information. It is therefore predicted that the use of non-GAAP profit figures will increase during the years of the GFC with the sixth hypothesis developed as follows:

Hypothesis 6:

> *The number of companies reporting non-GAAP profit figures will increase during the Global Financial Crisis.*

4.5.7 The AICD and FINSIA Guidelines on Underlying Profit

AICD and FINSIA issued guidelines on the reporting of underlying (non-GAAP) profit information in March 2009 (AICD & FINSIA 2009). Principle 1 of these guidelines encourages the reporting of a non-GAAP profit figure and reads 'report on the underlying profit, where relevant, in addition to the statutory profit' (p. 15). These guidelines encourage the reporting of such figures as a way of overcoming information asymmetry between managers and investors and other stakeholders. As these professional bodies have a large membership (more than 40,000 in total for both bodies in 2009) and the guidelines recommend the reporting of non-GAAP profit figures, it is predicted that the number of companies reporting such figures increased after the release of these guidelines. Thus, the seventh hypothesis is developed as follows:

Hypothesis 7:

> *The number of companies reporting non-GAAP profit figures will increase after the release of guidelines on reporting underlying profits by AICD and FINSIA.*

4.5.8 ASIC Regulatory Guide 230

ASIC released Regulatory Guide 230 *Disclosing non-IFRS financial information* and an accompanying Regulation Impact Statement in December 2011. The Regulatory Guide acknowledges that non-IFRS (non-GAAP) financial information 'can be useful for investors and other users of this information in certain circumstances' (ASIC 2011, p. 4). It also states that 'ASIC is not seeking to prohibit the use of non-IFRS financial information in documents related to the financial result' (ASIC 2011, p. 6) and does not, therefore, forbid the use of non-GAAP profit figures. Instead the Guide attempts to regulate the manner in which the figures are reported, as it states that the figures have the 'potential to be misleading' (ASIC 2011, p. 4). This stance is similar to that taken by the SEC in the US with the introduction of Regulation G. This Regulation did not prohibit the use of non-GAAP figures but required increased transparency and that GAAP figures are given equal prominence. Interestingly, the introduction of Regulation G in the US did lead to an immediate decrease in the use of non-GAAP figures by companies (Entwistle, Feltham & Mbagwu 2006a; Marques 2006) but this decrease appears to have been temporary with more recent studies showing their current use exceeding levels of the pre-Regulation G period (Black et al. 2012; Brown et al. 2012).

The conceptual model developed in this study predicts that companies may provide non-GAAP profit figures to overcome information asymmetry. As the ASIC Regulatory Guide 230 did not prohibit the use of these figures, it is predicted its release will not affect the number of companies choosing to report the figures. Thus, the eighth hypothesis is developed as follows:

Hypothesis 8:

> *The number of companies reporting non-GAAP profit figures will not be influenced by the release of Regulatory Guide 230 by ASIC.*

4.6 Non-GAAP Figures and Impression Management

When calculating and reporting non-GAAP figures, managers may behave opportunistically and employ impression management tactics to mislead shareholders and investors.

Shareholders and investors may be unable to detect and decipher the impression management tactics due to the effect of a residual loss. Indeed these assumptions of opportunistic behaviour and the use of impression management tactics to mislead investors and shareholders are validated by the introduction in Australia of the AICD and FINSIA guidelines concerning the reporting of such figures (AICD & FINSIA 2009) and the ASIC Regulatory Guide 230 which aims 'to promote full and clear disclosure for investors and other users of financial information and minimise the possibility of those users being misled by such information' (ASIC 2011, p. 1). It can be deemed from the aims of these guidelines that these bodies are not so much concerned with the actual reporting of non-GAAP profit figures but with the use of impression management tactics to emphasise these alternative figures over figures calculated using IFRS, thereby making the figures potentially misleading.

Some studies concerning non-GAAP figures have questioned whether the actual method of calculating the figure is opportunistic in itself, particularly if the figure excludes recurring expenses (Black & Christensen 2009; Brown, Christensen & Elliott 2012; Doyle, Lundholm & Soliman 2003; Frankel, McVay & Soliman 2011; Johnson & Schwartz 2005) or is manipulated to meet or beat analysts' forecasts (Bhattacharya et al. 2004; Doyle, Jennings & Soliman 2013; Frankel, McVay & Soliman 2011; Isidro & Marques 2015; Marques 2010). This study does not investigate the calculation of the figure and assumes that if the figure is reported transparently, with clear reconciliations and explanations then its reporting is not considered impression management. Rather this study is concerned with how the figure is presented to the shareholders and potential investors, that is, the use of prominence and emphasis compared to the GAAP result. The aim of this part of this study is to identify which drivers affect (either instigate or mitigate) the use of impression management when reporting non-GAAP figures.

In this study, including the research questions and hypotheses below, the term 'impression management' relates to strategies which are visual or structural and involve the emphasis, ordering and repetition of information and the use of fonts and styles in order to make a piece of information more obvious to readers (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011; Merkl-Davies & Brennan 2007). Previous literature has questioned whether the use of impression management

tactics in company reports is a conscious decision or not, although most studies assume it is a conscious behaviour (Abrahamson & Park 1994; Clatworthy & Jones 2006; Merkl-Davies & Brennan 2007; Staw, McKechnie & Puffer 1983). As the AICD and FINSIA Guidelines and ASIC Regulatory Guide specifically address the issue of prominence in reporting non-GAAP profit figures it could be assumed that any companies that continued to use these impression management tactics after the release of these guidelines did so deliberately and consciously. This is an important contribution of the current study.

The third and fourth research questions investigate what factors influence a firm's decision to engage in impression management tactics (as defined above) when reporting non-GAAP figures. Research Question 3 concerns firm characteristics that may influence this decision and asks:

> ***Research Question 3: Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific firm characteristics?***

To assess this research question, four hypotheses are developed that relate to specific firm characteristics (the same characteristics investigated in Research Question 1) which may influence whether a company uses impression management tactics when reporting non-GAAP profit figures.

4.6.1 Size

As discussed in Section 4.5.1, the size of a firm can exacerbate agency problems and information asymmetry. Previous studies have found that larger firms are more likely to voluntarily disclose information including non-GAAP profit figures (Johnson & Schwartz 2005; Malone, Tarca & Wee 2016; Marques 2010). As larger firms are more complex, agency costs are increased. It is therefore more likely that monitoring and bonding costs will not completely eliminate opportunistic behaviour and a residual loss will remain. Due to complexity and lack of monitoring, it is predicted that larger firms are not only more likely than smaller firms to report a non-GAAP profit figure but also more likely to use impression management tactics when reporting the figure. Thus, the ninth hypothesis is developed as follows:

Hypothesis 9:

> *Larger companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than smaller companies.*

4.6.2 Ownership Concentration

As discussed in Section 4.5.2, larger shareholders, including institutional investors, have more incentive and are more able to monitor management. They are usually more experienced or 'sophisticated' and have more power and influence with regards to management decisions. Smaller investors have less control over the information necessary to verify agents are acting in their interests (Abrahamson & Park 1994; Eisenhardt 1989) and may be more inexperienced (or 'less sophisticated') and therefore unable to decipher some of the information presented to them due to the effect of any residual loss. Young (2014, p. 453) explains that smaller, non-professional investors 'lack the necessary sophistication and experience to understand fully the precision and reliability of their information set' and their judgements may be particularly susceptible to mispricing of non-GAAP earnings. Indeed, previous studies have found that shareholder's (and potential investor's) perceptions of the usefulness, relevance and reliability of these figures, and the manner in which shareholders react to the disclosure, depends on their level of sophistication (Allee et al. 2007; Bhattacharya et al. 2007; Frederickson & Miller 2004; James & Michello 2010). More importantly for this current study is the finding that the effect these figures have on less sophisticated investors increases with the prominence given to the figure over the GAAP or IFRS result (Allee et al. 2007; Elliott 2006). It follows that management, if behaving opportunistically, may take advantage of dispersed ownership and the presence of smaller shareholders by using impression management tactics to emphasise the better performance figure and influence the shareholder's and other investor's decision making. It is therefore predicted that firms with a more dispersed ownership are more likely to use impression management when reporting non-GAAP profit figures than firms with concentrated ownership. Thus, the tenth hypothesis is developed as follows:

Hypothesis 10:

> *Companies with dispersed ownership are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies with concentrated ownership.*

4.6.3 Leverage

As discussed in Section 4.5.3, previous studies have found an association between high leverage and the disclosure of non-GAAP profit figures. This disclosure may be an attempt by management to provide incremental information to shareholders, who are concerned about the risk involved in high levels of debt, or even to the debtholders themselves. However, managers may still behave opportunistically when reporting non-GAAP profit figures. Shareholders may perceive a higher risk in more highly leveraged firms and feel more vulnerable due to creditor's claims over profits. These firms may attempt to allay any concerns and promote the appearance of good performance by emphasising a non-GAAP figure, particularly when it exceeds the GAAP result.

Management may also be attempting to influence debtholders by emphasising the non-GAAP profit figure. This has been found to be the case if the company is not subject to debt covenants or if existing covenants have not been violated (Christensen et al. 2017). Christensen et al. (2017) found a significant decrease in non-GAAP profit disclosures following debt covenant violations, with any disclosures that were made being of a higher quality. They surmised that pre-violation non-GAAP disclosures were used opportunistically but that the closer scrutiny following the violation, by both creditors and shareholders, tempered the opportunistic behaviour. It is therefore predicted that highly leveraged firms are more likely to use impression management when reporting non-GAAP profit figures with the eleventh hypothesis developed as follows:

Hypothesis 11:

> *Highly leveraged companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than lower leveraged companies.*

4.6.4 Good/bad News Firms

As discussed in Section 4.5.4, management may enter into contracts and provide extra information in an attempt to bond themselves to shareholders and reduce agency costs. When there is bad news to report in the form of lower profits or indeed a loss, management may provide extra information in the form of non-GAAP profits to avoid higher monitoring costs or the possibility of receiving lower remuneration. The reputation of CEOs and other

management may suffer during periods of decreased earnings and compensation packages are usually based on performance (Davidson et al. 2004). Therefore, there may be incentive to disguise bad news through the use of impression management tactics to highlight a higher non-GAAP figure. As Rutherford (2003, p. 189) suggests, '(a)gency theory holds that, in an environment in which their remuneration and wealth is linked to the financial performance of the companies that employ them, managements have economic incentives to disclose messages conveying good performance more clearly than those conveying poor performance.' The few previous studies that have investigated emphasis of non-GAAP figures when there is bad news have confirmed this assumption. Guillamon-Saorin, Garcia Osma and Jones (2012) investigated press release headlines and found that when there was a bad news year companies highlighted the non-GAAP figure or revenue rather than GAAP profits. In good news years, GAAP profit was highlighted in the headlines. Bowen, Davis and Matsumoto (2005) found that firms with a history of prior year losses place more emphasis on non-GAAP figures. They also found that firms emphasise the figure that portrays the better performance, a finding confirmed by other studies (e.g. Cameron, Percy & Stevenson-Clarke 2012; Marques 2010). It is therefore predicted that firms reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to use impression management when reporting non-GAAP profit figures. The twelfth hypothesis is developed as follows:

Hypothesis 12:

> *Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies reporting an increase in GAAP profits.*

Research Question 4 concerns the effect the specific events shown in Figure 4.2 may have had on the use of impression management tactics when reporting non-GAAP profit figures. Some of the events may have led to a significant change in the GAAP profit figure which in turn may have initiated a decision to exploit the effect of any residual loss and use impression management tactics to highlight an alternative, perhaps more favourable non-GAAP figure. Other events may have mitigated the use of impression management. This research question therefore asks:

Research Question 4: Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific events?

To assess this research question, four hypotheses are developed that relate to these specific events (the same events investigated in Research Question 2).

4.6.5 The Introduction of IFRS in Australia

As discussed in Section 4.5.5, Australia adopted IFRS effective for annual reporting periods commencing on or after 1 January 2005 and listed entities were required to comply with the Australian equivalents to IFRS from this date. As Wang and Welker (2011) reported, it is likely that management would have known about the significant effects the introduction of the standards would have on the reported net profit before shareholders and investors. They also predicted that managers may exploit this exogenously imposed information asymmetry to their advantage. It is therefore predicted that not only would companies have reported a non-GAAP profit figure, but it is likely the figure would have been given more prominence than the IFRS (or GAAP) figure. The thirteenth hypothesis is developed as follows:

Hypothesis 13:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.*

4.6.6 The Global Financial Crisis

As discussed in Section 4.5.6, management may have felt the need to report non-GAAP profits during the GFC in an attempt to provide more value relevant information on earnings. However, as information asymmetry was high and potential investors wary, this would also have been a time when opportunistic disclosures may have increased. Merkl-Davies and Brennan (2007) explain that the motivation to engage in impression management is connected to the desired outcome from its use, which in itself is a function of resources. The use of impression management may be more prevalent when resources are scarce. Therefore 'impression management should be stronger during economic downturns and when firms are in heightened competition for funds' (Merkl-Davies & Brennan 2007, p. 170). It is predicted

that the use of impression management when reporting non-GAAP figures will increase during the GFC and the fourteenth hypothesis is developed as follows:

Hypothesis 14:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase during the Global Financial Crisis.*

4.6.7 The AICD and FINSIA Guidelines on Underlying Profit

Although the guidelines on the reporting of non-GAAP profit information released by AICD and FINSIA (AICD & FINSIA 2009) encourage the reporting of non-GAAP profit figures, they also provide principles on the calculation and in particular the presentation of such figures. The first principle recommends companies report an underlying profit but notes that this should be done 'without giving undue prominence to the underlying profit figure' (AICD & FINSIA 2009, p. 15). The term 'undue prominence' is not explained. Principle 3 of the guidelines recommends that the underlying profit figure (non-GAAP) should be reconciled to the GAAP profit. It is predicted that the guidelines may have had some effect in reducing the use of impression management, particularly with the requirement of providing a reconciliation to GAAP profit and the call for no undue prominence. However, it should be noted that the guidelines only espoused best practice and are not mandatory and therefore there may have been little effect on the use of impression management following their release. The fifteenth hypothesis is developed as follows:

Hypothesis 15:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of guidelines on reporting underlying profits by AICD and FINSIA.*

4.6.8 ASIC Regulatory Guide 230

As stated in Section 4.5.8, the ASIC Regulatory Guide 230 acknowledges that non-IFRS financial information can be useful for investors but also attempts to regulate the manner in which the information is reported. In particular, companies reporting non-IFRS financial information (including non-GAAP profit figures) should give IFRS financial information equal or greater prominence, should explain non-IFRS information and reconcile it to the IFRS results, should calculate the information consistently from period to period and should

make sure the information is unbiased and has not been used to remove ‘bad news’ (ASIC 2011).

The introduction of Regulation G by the SEC in the US brought about a ‘substantial change’ (Entwistle, Feltham & Mbagwu 2006a, p. 51) to the way many companies reported non-GAAP results, particularly with regard to the use of impression management tactics. It is suggested that the introduction of Regulation G stopped some firms reporting non-GAAP figures as they could no longer do so in an opportunistic, less transparent fashion (Entwistle, Feltham & Mbagwu 2006a; Jennings & Marques 2011; Kolev, Marquardt & McVay 2008; Marques 2006; Yi 2012; Zhang & Zheng 2011). Several companies that did continue to report a non-GAAP figure appeared to adapt the calculation and presentation of the figure to show more transparency and lessen the magnitude of variations from GAAP, perhaps due to the requirement for a reconciliation to GAAP figures (Black et al. 2012; Entwistle, Feltham & Mbagwu 2006a; Frankel, McVay & Soliman 2011; Heflin & Hsu 2008; Jennings & Marques 2011; Kolev, Marquardt & McVay 2008). Regulation G required non-GAAP figures not be given prominence over GAAP figures and studies found companies generally changed the way they presented non-GAAP information (Entwistle, Feltham & Mbagwu 2006a, 2006b; Heflin & Hsu 2008; Marques 2010).

The release of Regulatory Guide 230 in Australia suggests that ASIC considers the use of emphasis to be a disclosure tactic that needed to be addressed and, along with the release of Regulation G in the US, brought the issue of non-GAAP figures to prominence. This means the effect of any residual loss may no longer be as relevant in relation to these figures as principles (shareholders) and potential investors have been made aware of the opportunistic practices of some agents in this regard. Although Regulatory Guide 230 is not law, ASIC is Australia’s corporate regulator and the body can take action against companies not complying with the Guide. It is therefore predicted that the use of impression management tactics by Australian companies in the reporting of non-GAAP profit figures will have decreased after the release of Regulatory Guide 230 and the sixteenth hypothesis is developed as follows:

Hypothesis 16:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of Regulatory Guide 230 by ASIC.*

4.7 Summary

This chapter developed a theoretical framework and conceptual model to explain the reporting of non-GAAP profit figures by Australian companies and the possible use of impression management to influence shareholder's perceptions of performance. Agency theory has been used to develop the model and this, along with existing literature discussed in Chapter 2 and the regulatory environment in Australia discussed in Chapter 3, has led to the development of four research questions and 16 hypotheses. The first two research questions and related hypotheses investigate what specific firm characteristics or specific events may influence a firm's decision to calculate and report non-GAAP profit figures. The third and fourth research questions and related hypotheses investigate what specific firm characteristics or specific events influence a firm's decision to engage in impression management tactics when reporting non-GAAP profit figures. These research questions and hypotheses are summarised in Table 4.1 below and the methods that will be implemented to examine these questions are explained in the next chapter.

Table 4.1: Research questions and hypotheses

The reporting of non-GAAP profit figures in Australia	
Research Question 1: *Is the company's choice to report non-GAAP profit figures influenced by specific firm characteristics?*	**H1:** Larger companies are more likely to report non-GAAP profit figures than smaller companies. **H2:** Companies with dispersed ownership are more likely to report non-GAAP profit figures than companies with concentrated ownership. **H3:** Highly leveraged companies are more likely to report non-GAAP profit figures than lower leveraged companies. **H4:** Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, or more likely to report non-GAAP profit figures than companies reporting an increase in GAAP profits.
Research Question 2: *Is the company's choice to report non-GAAP profit figures influenced by specific events?*	**H5:** The number of companies reporting non-GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia. **H6:** The number of companies reporting non-GAAP profit figures will increase during the Global Financial Crisis. **H7:** The number of companies reporting non-GAAP profit figures will increase after the release of guidelines on reporting underlying profits by AICD and FINSIA. **H8:** The number of companies reporting non-GAAP profit figures will not be influenced by the release of Regulatory Guide 230 by ASIC.
The use of impression management when reporting non-GAAP profit figures	
Research Question 3: *Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific firm characteristics?*	**H9:** Larger companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than smaller companies. **H10:** Companies with dispersed ownership are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies with concentrated ownership. **H11:** Highly leveraged companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than lower leveraged companies. **H12:** Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies reporting an increase in GAAP profits.
Research Question 4: *Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific events?*	**H13:** The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia. **H14:** The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase during the Global Financial Crisis.

Table 4.1: Research questions and hypotheses (continued)

H15: The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of guidelines on reporting underlying profits by AICD and FINSIA.

H16: The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of Regulatory Guide 230 by ASIC.

Chapter 5

Research Method

5.1 Introduction

This chapter describes the research method employed to answer the research questions and test the hypotheses that were developed in Chapter 4. An overview of the research design for the study is provided in Section 5.2 and this is followed by an explanation of the four stages of data collection in Sections 5.3 to 5.6. The variables used to investigate the research questions and related hypotheses are listed and described in Section 5.7. Section 5.8 describes the statistical tests to be used in the study and the chapter concludes with a summary in Section 5.9

5.2 Overview of Research Design

This study investigates the decision by companies to report non-GAAP profit figures including the use of impression management when reporting such figures. This study is an empirical archival study that employs content analysis and quantitative techniques to determine the influence of certain company characteristics and specific events on reporting decisions concerning non-GAAP profits. The study is longitudinal, covering twelve years from 2004 to 2015. This enabled the investigation of the specific events covered by the study, from the introduction of IFRS through to the release and subsequent effect of the Regulatory Guide 230 from ASIC.

5.2.1 Manual and Computer Assisted Data Collection and Analysis

A combination of manual and computer assisted data collection and analysis is used in the study, in line with some previous studies on organisational performance and/or impression management (Abrahamson & Park 1994; Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2005; Malone, Tarca & Wee 2016; Rainsbury, Hart & Buranavityawut 2015; Smith & Taffler 1992). Computer aided data collection and content analysis has advantages over manual collection and analysis including the use of larger data sets,

reliability and speed (Duriau, Reger & Pfarrer 2007). However, this method is not suited to all aspects of this study. Initially, the presence of any non-GAAP profit figures needed to be determined and as the terminology used to describe non-GAAP figures varies greatly across companies and different time periods, machine reading of text is inefficient for this purpose compared to manual collection (Marques 2017). Therefore, manual content analysis was used to identify occurrences of non-GAAP and GAAP figures which formed the basis of analysis for all four Research Questions. Research Questions 3 and 4 relate to the use of impression management tactics and as 'impression management techniques are subtle and sophisticated, and therefore complex' the use of manual content analysis may be warranted depending on the type of analysis being performed (Brennan, Guillamon-Saorin & Pierce 2009, p. 801). Manual content analysis was therefore used to code for the use of impression management techniques for these questions, as subjective judgement was required to apply coding rules to location and visual presentation effects. Computer assisted data collection and analysis was used to search for occurrences of non-GAAP and GAAP figures (using terms identified during the manual content analysis), to collect data concerning company characteristics, and to conduct the analysis of the data using *Microsoft Excel 2010* and *IBM SPSS Statistics 24*.

5.2.2 Population of Study

The population used in this study comprises the Standard & Poor's ASX 200 Index (hereafter 'Top 200') which are the largest 200 Australian listed public companies ranked by market capitalisation. The list of the Top 200 was obtained on 31 August, 2015 and accounted for 72% of the Australian equity market as at that date (Market Index 2015). Companies in the Top 200 are more likely to be followed by security analysts and also more likely to have diverse shareholders and financing needs (Malone, Tarca & Wee 2012). In order to reliably analyse changes in behaviour, it was important that the companies in the final sample were listed for the entire twelve years of the study. Also, the analysis for Research Questions 3 and 4 only involved the companies reporting a non-GAAP profit figure. The Top 200 was chosen as the population so as to obtain a large enough data set to perform the analysis once these other contingencies had been accounted for.

5.2.3 Phases of Data Collection

Once the population was established, the data collection proceeded in four phases. The first phase involved locating and downloading relevant historical documents and establishing the final sample of companies by eliminating those not meeting specific criteria (explained in Section 5.3.3). The second phase involved identifying which companies in the sample reported a non-GAAP figure and which did not (required for all research questions), and recording the amounts of the figures and their location in the documents. The third phase involved collecting data on the company characteristics investigated in Research Questions 1 and 3. In the fourth and final phase, a set of coding rules was applied to the documents containing non-GAAP figures in order to determine the use of impression management tactics and to arrive at a relative emphasis score to analyse Research Questions 3 and 4. These four phases of the data collection, including how the final sample was determined from the population, will now be explained in detail.

5.3 Data Collection Phase One

In the first phase of the data collection process, the list of the Top 200 companies was used to locate and download the relevant documents to be employed in the study. Companies may use a range of disclosure outlets to communicate current financial conditions and results (Brennan & Merkl-Davies 2013; Mayew 2012). These outlets include annual reports, press releases, shareholder presentations and conference calls, prospectuses, takeover documents, websites and in some cases, social media outlets. As this study involved archived documents from 2004 onward, some of these outlets (such as information provided on websites or social media at various times) were no longer available. For the purposes of this study, annual results press releases, annual reports and annual reviews were used with justification for this choice provided below.

5.3.1 Press Releases

Press releases are voluntary disclosures that offer a timely, easily accessible vehicle for management to communicate with shareholders, potential investors and other stakeholders on a range of topics, including the reporting of annual results (Guillamon-Saorin, Garcia Osma & Jones 2012). Timeliness is an important factor in voluntary disclosure (García Osma &

Guillamón-Saorín 2011) with the annual results press release usually the first document that highlights company performance for the year. As press releases are largely unregulated, there is potential for managers to attempt to influence the perceptions of readers by employing impression management tactics (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; Merkl-Davies & Brennan 2007). The contents are often covered by the national press and television which gives them a wider audience than annual reports (Brennan, Guillamon-Saorin & Pierce 2009).

In Australia, most public companies issue an annual results press release, which reports on the results in a narrative manner. The document is given various names such as 'media statement', 'media release', 'news release' and 'results announcement'. The format, content and length of the document vary greatly from company to company with no particular standard format being used. As they are voluntary, unaudited and with no set format, these documents provide an opportunity to report a range of profit figures and to employ impression management tactics when doing so (Hitz 2010). As this study involved analysing the GAAP and non-GAAP profit figures reported by companies as part of its annual results, annual results press releases were used as one of the disclosure documents investigated. Previous studies into the disclosure of non-GAAP earnings figures have overwhelmingly used only press releases (e.g. Bowen, Davis & Matsumoto 2005; Brown, Christensen & Elliott 2012; Doyle, Jennings & Soliman 2013; Entwistle, Feltham & Mbagwu 2004, 2005, 2006b; García Osma & Guillamón-Saorín 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Guillamon-Saorin, Isidro & Marques 2017; Hitz 2010; Lougee & Marquardt 2004; Marques 2010).

As there are other documents released to the market at the same time, it is important to define what was classified as an annual results press release in this study. Annual results press releases are voluntary documents where companies report their financial results and other aspects of performance in a narrative style. They do not follow any particular format. In Australia, companies must comply with ASX listing rules when releasing annual results to the market. Entities admitted to the ASX list sign an agreement to comply with these rules, which are enforceable under ss 793C and 1101B of the *Corporations Act 2001*. Listing rule 4.3A requires entities (except mining or gas and oil exploration entities) to supply the

information set out in Appendix 4E of Chapter 4 (Periodic Disclosure) of the listing rules to the ASX. The information provided and the accounts on which it is based must use the same accounting policies and comply with accounting standards. Appendix 4E requires particular results to be released, including revenue and profit from ordinary activities, along with financial statements and other information concerning items such as dividends, controlling entities, joint ventures, etc. A commentary on the results must also be provided. Appendix 4E is usually released on the same day (and sometimes in the same document) as the annual results press release. However, Appendix 4E is not a voluntary report and the format is dictated by the ASX requirements, which means that the setting out and contents of the Appendix is basically the same for each company. For these reasons this document was not included in this study, and only annual results press releases that are reported in a narrative style were used.

5.3.2 Annual Reports and Annual Reviews

Annual reports are a 'primary information source' for many stakeholders including investors and shareholders (Neu, Warsame & Pedwell 1998, p. 269) and are one of the most commonly researched documents in impression management studies (Merkl-Davies & Brennan 2007), particularly the Chairman's and CEO or President's letter (e.g. Abrahamson & Park 1994; Clatworthy & Jones 2003; Clatworthy & Jones 2006; Rutherford 2003; Smith & Taffler 1992). They are considered an effective platform for using impression management as they are viewed as credible documents but control over the content of the narrative section lies with the preparers (Neu, Warsame & Pedwell 1998).

Although annual reports have often been used in general impression management studies, most previous studies into the reporting of non-GAAP earnings figures in particular, have only examined press releases (see Section 5.3.1 above). This could be explained by their release providing a timelier vehicle for the use of impression management than annual reports. However, there have been a few studies concerning non-GAAP earnings that have examined annual reports (e.g. Cameron, Percy & Stevenson-Clarke 2012; Malone, Tarca & Wee 2016; Rainsbury 2016; Rainsbury, Hart & Buranavityawut 2015).

In Australia, some companies choose to release an annual review or shareholder review and a separate annual or financial report. These annual reviews generally comprise the narrative sections of annual reports such as performance highlights, the Chairman's and CEO's letters, and the Directors' Report or Review of Operations. Often the accompanying annual report is simply a financial report containing the financial statements and notes thereto or it may repeat the Chairman's letter and Directors' Report. Both the AICD and FINSIA guidelines and the ASIC Regulatory Guide 230 cover the use of non-GAAP figures in press releases, annual reports and other disclosure documents such as presentations to investors and briefings to analysts. As this study provides a comprehensive investigation into the practice of disclosing non-GAAP figures in Australia, including the effect of the AICD and FINSIA guidelines and the ASIC Regulatory Guide 230, annual results press releases, annual reports and annual reviews were all considered relevant and formed part of the data set. For the purposes of this study, where annual reviews were issued, both the annual review and the annual or financial report were downloaded and used when collecting data. In the analysis and results for this study, the annual review and annual report/financial report were considered collectively as one document, the 'annual report', and the potential for repetitive data was considered during analysis with processes put in place to avoid double-counting.

5.3.3 Collection of the Documents and Sample Determination

The annual results press releases and annual reports were downloaded and saved to a computer for the period 2004 to 2015 from the Top 200. The majority of the reports were sourced from the *Morningstar DatAnalysis Premium* database. In the few instances where reports were not available from this database, the individual company's website was used to obtain the documents.

During this first phase of the data collection, a total of 91 companies were eliminated from the population as explained below:

- As this is a longitudinal study, companies in the final sample needed to be listed for the entire period so that changes in behaviour could be assessed (Sinnewe, Harrison & Wijeweera 2017). Sixty-nine companies were not listed on the Exchange for the full twelve years of the study and were eliminated.

- As some variables are expressed in dollar values it was necessary that all reports be in Australian dollars. Twenty-one companies reported in a foreign currency at some stage in the twelve-year timeframe.
- One company was eliminated due to its complicated trust structure where reports covered multiple trusts and did not report single figures for Net Profit.

This left a total of 109 companies (1,308 firm years) from the population of companies that met all criteria for inclusion in the next three phases of the data collection process. A list of companies in the final sample, and the industry they belong to, is provided in Appendix 1.

5.4 Data Collection Phase Two

In the second phase of the data collection process, the downloaded documents were searched in order to establish which companies reported non-GAAP profit figures and which did not. This information formed the basis for more in-depth analysis of the research questions and hypotheses and provided descriptive statistics on the prevalence of the use of non-GAAP profit figures in Australia over the period of the study. Some previous studies concerning non-GAAP earnings have not always been clear on what they included in the definition of non-GAAP earnings (e.g. Cameron, Percy & Stevenson-Clarke 2012; Choi & Young 2015; Entwistle, Feltham & Mbagwu 2004; Rainsbury 2016; Sinnewe, Harrison & Wijeweera 2017). Differences in the definition of the term, and in the sample itself, have led to differing results, particularly concerning descriptive statistics, for studies covering the same timeframe. In order to carry out this phase of the data collection, it was first necessary to define what would be considered a non-GAAP profit figure for this study.

5.4.1 Definition of 'Non-GAAP' Profit Figure

This study defines non-GAAP profit figures as figures that purport to be a representation of profit, but which have been calculated other than in accordance with relevant IFRS/GAAP. This includes, for example, figures that exclude significant or non-recurring items. For the purpose of this study the figures must be expressed in the same manner as the net profit after tax calculated under IFRS/GAAP, that is, as a total profit figure. Therefore, this study does not include non-GAAP earnings per share, a figure that has been studied in extant literature

on non-GAAP reporting (e.g. Bhattacharya et al. 2003; Bhattacharya et al. 2004; Black & Christensen 2009; Bradshaw & Sloan 2002; Brown, Christensen & Elliott 2012; Ciccone 2002; Doyle, Jennings & Soliman 2013; Doyle, Lundholm & Soliman 2003; Entwistle, Feltham & Mbagwu 2004; Entwistle, Feltham & Mbagwu 2005, 2006b). The reason these figures are not included is because various earnings per share figures are required to be calculated and reported under AASB133 (Australian Accounting Standards Board 2012) and the ASIC Regulatory Guide does not include these amounts in its definition of non-GAAP information (ASIC 2011, p. 8).

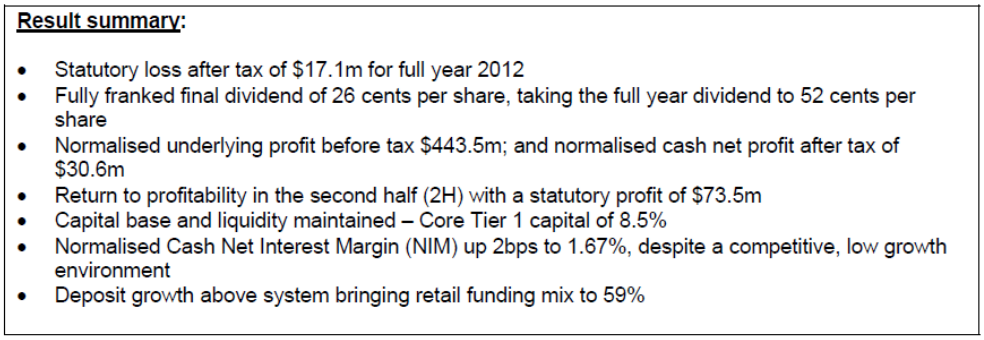
Although many studies are unclear on their definition of non-GAAP earnings, some studies have clearly stated that they did not include EBIT and EBITDA. Reasons for their exclusion include that the figures are commonly used and understood by investors, are sometimes included in the income statement, and were in use long before the trend in non-GAAP earnings began in the late 1990s (Allee et al. 2007; Bhattacharya et al. 2003; Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2006b, 2010; Malone, Tarca & Wee 2016). Using the same reasoning, this study does not include EBIT and EBITDA in the definition of a non-GAAP profit figure. However, for completeness during this second phase of data collection, a note was made as to which companies reported either or both of these figures and the actual amount of the figures was recorded.

Once the definition of a non-GAAP profit figure was determined, the annual results press releases and annual reports were analysed to locate the presence of any such figures, as well as the presence of EBIT or EBITDA figures. Firstly, the annual results press release was read in total to determine if such a figure had been reported. If so, the name given to the figure was used to search the annual report. In addition to this, a search of each annual report was conducted using the following terms:

Underlying	*operating profit*	*after tax but*
Normalised	*exceptional*	*after tax adjusted*
Significant	*non-recurring*	*after tax attributable*
Adjusted	*after tax pre*	*profit excluding*
Core	*after tax before*	*after tax excluding*
Unusual	*after tax and before*	*EBIT* (this also enabled location of *EBITDA*)

This list was based on search terms used in previous studies and also terms discussed in the AICD and FINSIA guidelines and ASIC Regulatory Guide concerning non-GAAP profits. Where a company reported more than one non-GAAP profit figure, the 'after tax' figure was used as this was considered to be the figure that would be most comparable to the GAAP after tax profit. For example, the 2012 annual results press release for the Bank of Queensland began with these highlights:

Figure 5.1: Highlights section of Bank of Queensland annual results press release 2012



Result summary:

- Statutory loss after tax of $17.1m for full year 2012
- Fully franked final dividend of 26 cents per share, taking the full year dividend to 52 cents per share
- Normalised underlying profit before tax $443.5m; and normalised cash net profit after tax of $30.6m
- Return to profitability in the second half (2H) with a statutory profit of $73.5m
- Capital base and liquidity maintained – Core Tier 1 capital of 8.5%
- Normalised Cash Net Interest Margin (NIM) up 2bps to 1.67%, despite a competitive, low growth environment
- Deposit growth above system bringing retail funding mix to 59%

Source: Bank of Queensland ASX Release 2012, page 1.

The 'normalised cash net profit after tax' was selected as the non-GAAP figure for this study as it was 'after-tax' and was also the figure used to reconcile the non-GAAP figure to GAAP in the years where detailed reconciliations were disclosed.

The data in this phase was hand-collected and recorded in a *Microsoft Excel* spreadsheet for each of the years from 2004 to 2015. A record was made of whether or not the company reported a non-GAAP profit figure, the amount of the GAAP profit and the non-GAAP profit, the name given by the company to the non-GAAP profit, and whether or not EBIT and EBITDA were disclosed and their relevant amounts. A note was then made of the location where the non-GAAP profit was disclosed, whether it was in the press release and/or the annual report and in which sections of the annual report. The GAAP profit recorded was the amount from the income statement that was attributable to members of the parent entity as this is the amount commonly reported in the press release and the voluntary sections of the annual report.

5.5 Data Collection Phase Three

In the third phase of data collection, information was gathered concerning the measures used for the independent variables for Research Questions 1 and 3 (specific firm characteristics) and also for descriptive statistics (see Section 5.7 for a discussion on how each variable was defined and measured). Once again, the *Morningstar DatAnalysis Premium* database was used to gather data on industry, market capitalisation, total assets, total liabilities and total equity for the twelve years included in the study. The percentage of shares owned by the top 20 shareholders (used to measure ownership concentration) was individually collected from the annual reports of the companies for each year of the study. This was necessary as only the current year and the prior year are available from the database and this data was collected in 2018 (therefore data from 2004 to 2015 was not available).

5.6 Data Collection Phase Four

Research Questions 3 and 4 concern the use of impression management tactics by companies when reporting non-GAAP profit figures. Impression management studies have predominantly focused on the content analysis of discretionary narrative disclosures released by companies (Brennan, Guillamon-Saorin & Pierce 2009; Merkl-Davies & Brennan 2007). Merkl-Davies and Brennan (2007) identified seven impression management strategies that have been investigated in prior literature. One such strategy involves the choice of earnings number (e.g. non-GAAP profits) with previous studies using content analysis and quantitative methods to investigate the use of impression management in presenting such figures (e.g. Bowen, Davis & Matsumoto 2005; Cameron, Percy & Stevenson-Clarke 2012; Entwistle, Feltham & Mbagwu 2004, 2005, 2006b; García Osma & Guillamón-Saorín 2011; Marques 2010). The fourth and final phase of data collection involved applying a set of coding rules to determine a score for the use of impression management tactics relating to emphasis through the use of location/prominence and repetition when presenting non-GAAP profit figures. This phase involved locating instances of both non-GAAP and GAAP profit figures in the disclosure documents for any firm years where a non-GAAP figure was reported. The coding rules were then applied to assign a score for location/prominence and repetition of figures. These scores were recorded in a *Microsoft Excel* spreadsheet and were used to determine an impression management index to indicate relative emphasis. The development of the

impression management index and the procedures for coding of the reports are described in detail below.

5.6.1 Impression Management – Emphasis Through Use of Location/Prominence and Repetition

Studies have revealed that people are strongly influenced by the first piece of information they read, which can then bias their evaluation of subsequent information (Asch 1946; Hirshleifer & Teoh 2003; Huang, Nekrasov & Teoh 2012; Lim, Benbasat & Ward 2000). In Australia, guidelines from professional bodies and ASIC have expressed concern that non-GAAP profit figures may be misleading and thus should not be given undue prominence or greater emphasis than GAAP figures (AICD & FINSIA 2009; ASIC 2011).

The first principle in the AICD and FINSIA guidelines suggests companies report non-GAAP figures in a manner that 'clearly differentiates underlying profit from statutory profit without giving undue prominence to the underlying profit figure' (AICD & FINSIA 2009, p. 15). This is furthered by the ASIC Regulatory Guide 230 that requires that 'IFRS financial information should be presented with equal or greater prominence, emphasis or authority compared to the corresponding non-IFRS financial information' (ASIC 2011, p. 18). The Regulatory Guide explains that determining whether this requirement is met is a matter of judgement and should take whole documents into account. It suggests that factors such as the order of the reported figures and the manner in which the two figures are presented should be considered (ASIC 2011, p. 20). This is operationalised in this study as it develops and implements an impression management index incorporating impression management tactics relating to emphasis (measured by location/prominence and repetition) as an indicator of the extent of impression management used in the reporting of non-GAAP profit information by Australian companies.

There are multiple ways in which to emphasise or give prominence to a particular figure, and these take the form of visual or presentational techniques (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011). These techniques include using a prominent location in the document such as in the headlines or

first few paragraphs, or using visual emphasis such as bullet points, bold text, etc. (Brennan, Guillamon-Saorin & Pierce 2009). Repeating a particular figure can also serve to emphasise it to readers. As Brennan, Guillamon-Saorin and Pierce (2009, p. 813) explain, repetition of a piece of information, particularly in a short document such as a press release, 'can cause the reader to focus on that specific issue while diverting attention from other issues', which may be misleading if only one piece of information (e.g. the higher earnings figure) is repeated.

Previous studies concerning non-GAAP figures have examined emphasis through presentation techniques with varying levels of sophistication being applied to the measure. Some studies document only which measure was mentioned first (Bhattacharya et al. 2003; Cameron, Percy & Stevenson-Clarke 2012; Koning, Mertens & Roosenboom 2010). Others have used a scoring system to arrive at a level of emphasis. For example, Bowen, Davis and Matsumoto (2005) used a four-point scale which ranged from a four awarded to a figure in the headline to a one awarded to a figure in the financial statements. Marques (2010) extended this to a six-point scale, awarding points for other sections and types of emphasis in the press release. These studies only coded and scored the prominence of the very first time the non-GAAP figure was mentioned in the document. Therefore, a company that reports a non-GAAP figure once only in a press release (e.g. in the headline) would receive the same score as a company that reported the figure five times including once in the headline. Using the arguments from Brennan, Guillamon-Saorin and Pierce (2009) the second example has given more emphasis to the non-GAAP figure than the first due to repetition, but the scoring system used in these prior studies did not take repetition into account.

Some studies only coded the disclosure of non-GAAP figures (e.g. Guillamon-Saorin, Isidro & Marques 2017) and therefore provided no comparison to the emphasis or prominence given to the GAAP figure. However, others have attempted to measure or determine the relative emphasis of the non-GAAP figure compared to the GAAP figure (Bowen, Davis & Matsumoto 2005; Cameron, Percy & Stevenson-Clarke 2012; Entwistle, Feltham & Mbagwu 2004, 2006a; Hitz 2010; Marques 2010). Cameron, Percy and Stevenson-Clarke (2012) and Entwistle, Feltham and Mbagwu (2004) made subjective determinations as to relative emphasis by reading the documents involved and making a decision. Other studies have used

a more objective method, scoring both types of figures and then subtracting one score from the other (Hitz 2010; Marques 2010).

This study exams whether non-GAAP profits were given undue prominence or emphasis relative to GAAP profits and therefore developed a scheme which coded both non-GAAP and GAAP figures for impression management tactics relating to emphasis (Bowen, Davis & Matsumoto 2005; Hitz 2010; Marques 2010). A relative emphasis score was calculated by subtracting the resulting impression management score for GAAP profits from the score for non-GAAP profits (Hitz 2010; Marques 2010). Unlike many previous studies, all occurrences of the figure in question were coded when calculating either the location/prominence and/or the repetition score (except those in and beyond the Financial Statements in the annual report). The coding rules and procedures are explained in the next section, with a detailed set of coding rules contained in Appendix 2.

5.6.2 Coding Rules and Procedures

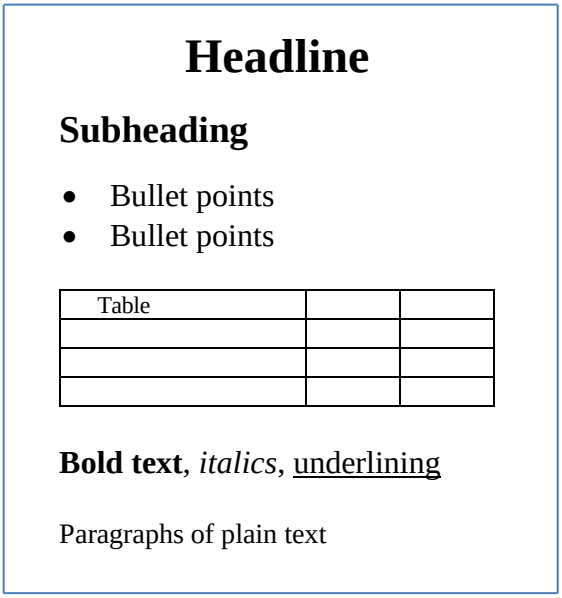
The coding and calculation of the impression management scores involved content analysis, a research technique that makes 'replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use' (Krippendorff 2004, p. 18). Techniques used should be reliable and the results obtained should be able to be replicated by others (Krippendorff 2004; Milne & Adler 1999). This study analysed the content of the disclosure documents for emphasis of non-GAAP and GAAP profit figures through location/prominence and repetition of the figures and did not attempt to analyse the meaning of other text in the documents. The coding followed clear techniques and was therefore relatively objective as there was no attempt to interpret surrounding text and its meaning.

5.6.2.1 Emphasis through presentation effects: location of information, special characters, type of font

Both the press release and the annual report were coded for location/prominence of the non-GAAP and GAAP figure through the use of presentation effects. Press releases were coded for the location and prominence of the particular figures through the use of headlines,

subheadings, bullet points, tables, bold, italics or underlining and plain text paragraphs as illustrated in Figure 5.2.

Figure 5.2: Illustration of examples of location and prominence used in coding of annual results press releases



In the press release, **all** non-GAAP and GAAP figures in the relevant locations were coded and not just the first occurrence of the figure. The figures received a score ranging from a four if in the headline at the top of the press release to a one if in paragraphs three or four of the plain text (see Appendix 2 for a detailed description of the presentation effects and scoring system). As impression management techniques relating to location/prominence are usually employed early on in a document, any plain text beyond paragraph four was not coded for location/prominence (Brennan, Guillamon-Saorin & Pierce 2009). Some press releases have a 'summary results' table at the end of the press release as an appendix. These tables were also not coded for location/prominence as they were at the end of the release after the signature. As it is possible that each type of figure, non-GAAP and GAAP, could appear equally in sections of the press release and the resulting emphasis scores could be equal, a score of 0.5 was awarded to the figure that appeared first in the document as an indication of which figure had prominence (Marques 2010). It is of note that it is possible for a score of zero to be allocated to a non-GAAP or GAAP figure even though it appeared in the press release if it was not located until after paragraph four.

Annual reports are considerably longer documents than press releases. For example, the 2015 annual report from Westpac Bank was 284 pages in length. To assist with the coding for presentation effects and location, the annual report, was divided into sections such as 'highlights' (located at the beginning of the annual report and usually containing bullet points, graphs and/or tables), Chairman's letter, CEO letter, Directors' Report, Financial Statements, etc. Scores were then awarded for the section of the report in which the non-GAAP and GAAP profit figures appeared. Due to the length of the document, scores were not awarded for presentation effects such as headings, bold, tables, bullet points, italics or underlining.

In the annual reports, the first occurrence of a non-GAAP figure and the first occurrence of a GAAP figure **in each section** were scored for location/prominence. Repeated occurrences within the sections were not scored for location, however every non-GAAP and GAAP profit figure was scored for emphasis through repetition, see section 5.6.2.2 below. Higher scores were awarded for sections that came earlier in the reports as previous studies have found that people are strongly influenced by the first piece of information they see and that this information biases their evaluation of subsequent information (Asch 1946; Hirshleifer & Teoh 2003; Huang, Nekrasov & Teoh 2012; Lim, Benbasat & Ward 2000). The scores for location ranged from three to one as follows:

- 'Highlights' section = 3
- Chairman's letter = 2
- CEO letter = 2
- Key financials (section after Chairman's and CEO letters) = 1
- Directors' Report and/or the Review of Operations = 1

As impression management is most likely to be utilised in the unaudited, narrative sections of annual reports, the Financial Statements, Notes to the Statements and any sections beyond the Notes were not coded (Merkl-Davies & Brennan 2007; Neu, Warsame & Pedwell 1998). As with press releases, the type of figure (non-GAAP or GAAP) reported first in the entire document received an extra 0.5 score.

5.6.2.2 Emphasis through repetition

To capture emphasis achieved through repetition a separate score was kept for repetition in each of the documents for all GAAP and all non-GAAP figures. All occurrences of the non-GAAP and GAAP figure were coded for repetition in the press release (including occurrences beyond paragraph four) and all occurrences up to the Financial Statements were coded in the annual reports. The first occurrence of either of the figures received a score of zero with all other occurrences (repetitions) receiving a score of 0.5. Three examples of press releases coded for both presentation effects and repetition are contained in Appendix 3.

5.6.2.3 Calculation of relative emphasis

Both GAAP and non-GAAP profit figures were scored using the coding rules and a total impression management score (IM score) for each type of figure was calculated by adding the score for location/prominence and the score for repetition. The resulting IM score indicates the level of emphasis different companies give to each of the figures, non-GAAP and GAAP, over the years included in the study. This study aims to determine if one type of figure was given emphasis over the other type and so the 'relative' emphasis of one figure compared to the other is important. Therefore, the total IM scores for each type of figure were used to calculate a relative emphasis score which was then used to investigate Research Questions 3 and 4. The relative emphasis score was calculated by applying the following formula:

IM score for non-GAAP minus IM score for GAAP = Relative Emphasis Score

If the result of the relative emphasis calculation was a positive number, the non-GAAP figure had been emphasised or given more prominence than the GAAP figure by that company for that year. If the result was a negative number, the GAAP figure had been emphasised or given more prominence over the non-GAAP figure by that company for that year. In order to fully investigate differences in the relative emphasis between the various disclosure documents, a separate relative emphasis score was calculated for the press release and the annual report, as well as a total for both documents.

5.6.2.4 Reconciliation of non-GAAP profit figure to GAAP profit figure

The use of impression management tactics involving emphasis of non-GAAP profits may mislead investors, particularly non-professionals, but previous studies have found that the presence of a clear reconciliation between the GAAP and non-GAAP figures can mitigate this effect (Allee et al. 2007; Elliott 2006; Marques 2010). It is also noted that both the ASIC Regulatory Guide 230 and the AICD and FINSIA guidelines on reporting non-GAAP profits recommend the inclusion of a reconciliation between the two figures. The AICD and FINSIA guidelines suggest the reconciliation should be 'transparent, logical and justifiable' (AICD & FINSIA 2009, p. 17) and ASIC require significant adjustments to be separately itemised and explained (ASIC 2011, p. 18).

The presence of a reconciliation does not form part of the impression management index developed in this study, as the index needs to be equally applicable to both GAAP and non-GAAP figures in order to find the relative emphasis. However, during the coding process it was noted whether a reconciliation between the two figures was provided and this is reported along with other results in Chapter 6. For a reconciliation to be deemed as having been provided in the document, the actual reconciliation must have been included and not simply a statement directing the reader to another document. To be deemed a reconciliation in this study, the company had to demonstrate how one figure was deduced from the other figure with adjustments clearly labelled and itemised. For example, the table located at the end of the Ramsay Health Care Ltd press releases from 2012 to 2015 was not considered a reconciliation for the purposes of this study (Figure 5.3a shows the 2012 press release table). However, a detailed note in each of the annual reports for these years was considered a reconciliation (Figure 5.3b).

Figure 5.3a: Illustrative example of when to deem disclosure as a reconciliation between non-GAAP and GAAP profit figures

Excerpt from table at end of Ramsay Health Care Ltd 2012 press release (not considered a reconciliation)

Core NPAT (1)		**252,646**
Net non-core items, net of tax (2)		(8,541)
Reported NPAT		244,105

Figure 5.3b: Illustrative example of when to deem disclosure as a reconciliation between non-GAAP and GAAP profit figures

Excerpt from Notes section of Ramsay Health Care Ltd 2012 annual report (considered a reconciliation)

Net profit attributable to owners of the parent	244,105
Add/(less) non-core items:	
- Non-cash rent expense relating to UK leased hospitals	23,693
- Amortisation - service concession assets	2,186
- Profit on sale of assets	(7,406)
- Income from the sale of development assets	(4,976)
- Book value of development assets sold	4,355
- Acquisition, disposal, and development costs	5,466
- Impairment of non-current assets	-
- Defined benefit pension plan costs	-
- Loss on interest rate hedge	67
- Charge for expired debt facility costs due to early refinancing	5,924
Income tax on non-core items	(3,153)
Income tax refund received relating to changes to tax consolidation legislation	(17,051)
Non-controlling interest in non-core items (net of tax)	(564)
	8,541
Core profit (segment result) after tax from continuing operations	252,646

5.6.2.5 Coding reliability

The reliability of the coding is important as the results should be replicable and valid inferences should be able to be drawn from the analysis (Kassarjian 1977; Krippendorff 2004; Milne & Adler 1999). The reliability of the analysis can be demonstrated by having a reliable and detailed set of coding rules and also experienced coders (Kassarjian 1977). The coding rules should specify what and how to code and how to measure and record the data being coded (Milne & Adler 1999). Krippendorff (2004, pp. 215-216) explains that there are three types of reliability when using content analysis techniques:

1. *Stability* – this is the degree to which the process does not change and attains the same results over time. It can be assessed using a test-retest procedure where the same data is recoded by the same coder after an intervening period of time. This reliability data is the easiest to obtain but provides the weakest form of reliability.
2. *Reproducibility* – this is the degree to which the process can be replicated by a different coder working at a different location. Differences between coders are usually due to differences in the interpretation and application of the coding rules or random errors in coding and recording. Most differences should be resolved by discussing the results, clarifying the rules and recoding the data. This is a stronger measure of reliability than stability.

3. *Accuracy* – this is the degree to which the coding of data conforms to a standard or norm. Data is compared to the performance of a procedure or a standard that is taken to be correct.

Both stability and reproducibility were used to measure reliability of the coding instrument for the impression management index in this study. The content analysis techniques for locating and recording the GAAP and non-GAAP figures in phase two of the data collection, described in Section 5.4, were not tested for reliability as the identification of these figures was considered to be capable of objective coding (Brennan, Guillamon-Saorin & Pierce 2009).

To measure reliability using stability, a test-retest procedure was used. The documents for six companies randomly selected from the 109 companies in the sample (5.5%) were re-coded by the initial coder (the author of this thesis) after a period of four months from the initial coding. Of the 283 instances of a non-GAAP or GAAP number, 270 resulted in the same coding result, a reliability coefficient of 95.4%. The largest difference (six differences) concerned a company which was coded early in the original coding. In most instances both the GAAP and non-GAAP numbers were equally different from the original coding so the overall relative emphasis either did not change or changed only slightly.

A second test of reliability of the coding instrument was also conducted using reproducibility. A pre-test of the coding and calculation of the impression management index was conducted using annual results press releases and annual reports from ten different companies in the population by two researchers (the author of this study and a supervisor). The companies in question were not included in the final sample as they were not listed in 2004 (and therefore eliminated for not being listed for the entire twelve years) but were listed for the other eleven years. Pre-testing with companies not in the final sample also enabled the category reliability, that is, the definitions for the specific sections of the press release and annual report used in the coding rules, to be tested (Kassarjian 1977; Kolbe & Burnett 1991). Data concerning whether a non-GAAP figure was reported by the companies in each of the eleven years from 2005 to 2015 was collected and recorded by the author. Of the 110 firm years in this pre-test sample there were 58 firm years in which a non-GAAP profit figure was reported by a company in either the press release or annual report or both documents. From these 58 firm

years, ten firm years were randomly selected and the press releases and annual reports from these years were downloaded.

To conduct this pre-test, the two researchers held an initial meeting to discuss the coding rules and category definitions and clarify any misunderstandings. The second coder was provided with the coding rules, copies of the documents to be coded, a spreadsheet listing the amount of the non-GAAP and GAAP figures for each year and a spreadsheet to record the results. The researchers then worked independently from each other (Kolbe & Burnett 1991) and used the impression management index coding rules to code the ten press releases and ten annual reports. A second meeting was then held to compare the resulting scores from the application of the impression management index. The individual documents included in the pre-test sample were also compared to make sure the coding of each occurrence of a number was consistent; there were 99 occurrences of either a non-GAAP or GAAP number in the twenty documents. This process enabled clarification of the coding rules and procedures and of the category definitions. For example, the setting out of an annual report was discussed and the difference between a 'highlights' section and a 'key financial data' section was clarified. It was also decided that the Chairman's letter and the CEO letter should be coded separately, and both counted as a different section.

From this process, the coding rules were revised. The procedure for searching the documents and recording the location and repetition scores was also discussed and modified so that all recording for both location and repetition was completed progressively and the document only had to be searched and analysed once. It was agreed this modification would avoid potential errors such as missing repetitions.

After the initial coding process, the results for the coding of the press releases were 100% identical between the two coders. However, for the overall coding the coefficient of agreement (total number of agreements divided by total number of coding decisions) was 80.81% due to issues in the annual reports. One issue was how to code the 'key financial data' as the initial coding rules did not have this section of the annual report as a separate category. However, the level of disagreement was found to be mainly due to a misunderstanding of a coding rule by one of the coders. The coder only recorded prominence

results for the first number (either GAAP or non-GAAP) that appeared in the annual report. If the first number was a non-GAAP figure, then the GAAP figures were not coded for prominence and the score was recorded as a zero. From this misunderstanding, the coding rules were revised and made clearer and the coder involved recoded the reports. In comparing results, the two coders matched 98.99% for the 99 instances of a number coded, with the only difference being where one coder had mistakenly given a repeated number a score for prominence in the annual report when it was the second occurrence of the number in the particular section. The low level of disagreement from this second round of coding indicates a high level of reliability (Kassarjian 1977; Kolbe & Burnett 1991).

Locating, coding and recording the impression management scores for both the non-GAAP and GAAP figures concluded the data collection process. The measurement of the variables and the statistical tests used to investigate the research questions will now be discussed.

5.7 Measurement of Variables

Research Questions 1 relates to the effect certain specific firm characteristics may have on the decision of management to disclose non-GAAP profit figures and Research Question 3 adds to this by including the use of impression management tactics. Research Question 2 relates to examining whether certain specific events influenced the decision by companies to report a non-GAAP profit figure and Research Question 4 furthers this by including the use of impression management tactics. The variables used to investigate these research questions will now be discussed.

5.7.1 Independent Variables

The independent variables for Research Question 1 represent firm characteristics which, consistent with agency theory, have the potential to influence a company's decision to report a non-GAAP profit figure and for Research Question 3 the variables that may influence the use of impression management when reporting such figures. The independent variable for Research Questions 2 and 4 (examining the influence of specific events) is a categorical variable representing the particular year in question. The specific firm characteristics

investigated in Research Questions 1 and 3, and the approach taken in their measurement, are discussed below.

5.7.1.1 Size

Size was investigated as, under agency theory, larger firms are more complex and have a wider ownership base and can therefore be more difficult for principals to monitor (Fama & Jensen 1983b; Jensen & Meckling 1976; Meek, Roberts & Gray 1995). This leads to greater agency costs and information asymmetry. Following agency theory, large firms are more likely to report non-GAAP profit figures in order to bond with shareholders but are also more likely to use impression management tactics due to the greater information asymmetry and the effect of any residual loss.

There are different methods for measuring the size of a company. The most common methods used in previous literature concerning non-GAAP and other earnings disclosure are log of total assets (Entwistle, Feltham & Mbagwu 2012; Frankel, McVay & Soliman 2011; Guillamon-Saorin, Garcia Osma & Jones 2012; Heflin & Hsu 2008) and log of market capitalisation (Isidro & Marques 2013, 2015; Malone, Tarca & Wee 2016). In the current study, as total assets were used in the calculation of the measure for leverage (Section 5.7.1.3), it was not used to measure size in order to reduce any potential multicollinearity amongst the independent variables. Instead, log of market capitalisation was used as a measure for company size (*SIZE)*. The log of market capitalisation was used as the actual market capitalisation figures were significantly, positively skewed. It is important to note that the size of the companies in the Top 200 varies greatly with regards to market capitalisation and in 2015, when the sample was determined, the figures ranged from $167 million to $123 billion.

5.7.1.2 Ownership Concentration

In companies with concentrated ownership, larger shareholders, including institutional investors, are more able to monitor and influence management compared, to those with smaller shareholdings. Information asymmetry is therefore higher when ownership is more

dispersed as there is a greater percentage of small shareholders who are less able to demand information. Therefore, to overcome information asymmetry and bond with shareholders, companies with more dispersed ownership are more likely to report extra information including non-GAAP profits. Ownership concentration has been measured in a variety of ways in previous literature including the percentage of shares held by shareholders who hold a particular minimum percentage of equity (Alves 2012), the percentage of shares owned by the single largest shareholder (Gul, Kim & Qiu 2010), and the percentage of shares held by the top twenty shareholders of the firm (Barako, Hancock & Izan 2006; Lange & Sharpe 1995). In Australia, ASX Listing Rule 4.10.9 requires listed entities to disclose their top twenty shareholders, and the percentage of shares they hold, in their annual report. As this information was readily available, ownership concentration (*OWN)* was measured by the total percentage of shares held by the top twenty shareholders. The higher the percentage, the more concentrated is the ownership of the organisation.

5.7.1.3 Leverage

High levels of leverage are associated with increased risk and shareholders and investors may perceive earnings to be less informative in highly-leveraged companies. Management may therefore wish to provide extra information on profits in the form of non-GAAP figures and may allay any fears of shareholders by emphasising good performance if these figures exceed the GAAP figures (Lougee & Marquardt 2004). Leverage has been measured using a variety of methods in previous literature including the ratio of total debt to equity (Guillamon-Saorin, Garcia Osma & Jones 2012; Heflin & Hsu 2008; Lougee & Marquardt 2004), the ratio of long term debt to equity (Chua, Cheong & Gould 2012; Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995) and the ratio of total debt to total assets (Gallery, Cooper & Sweeting 2008; Isidro & Marques 2013, 2015; Wong & Wong 2010). Both total debt (liabilities) to total equity and total debt (liabilities) to total assets were considered in this study and the relevant data was analysed. The measures for total debt to total equity for each year were significantly skewed whereas total debt to total assets were normally distributed. Therefore, total debt (liabilities) to total assets was used as a measure of leverage (*LEV*).

5.7.1.4 Good/bad News Firms

In order to avoid higher monitoring costs or lower remuneration, agency theory predicts that managers may provide extra information such as non-GAAP profit figures in years that could be considered 'bad news' years, with previous studies confirming this assumption (Bhattacharya et al. 2004; Entwistle, Feltham & Mbagwu 2004; Isidro & Marques 2015; Johnson & Schwartz 2005; Lougee & Marquardt 2004). Previous studies have defined 'bad news' companies in different ways, most commonly as companies with a decrease in GAAP profits from the previous year (Brennan, Guillamon-Saorin & Pierce 2009; Clatworthy & Jones 2003; García Osma & Guillamón-Saorín 2011; Smith & Taffler 1992) and as companies with a GAAP loss (Frankel, McVay & Soliman 2011; Malone, Tarca & Wee 2016; Wong & Wong 2010). In bad news years, management has incentive to emphasise any messages conveying good news and may therefore use impression management to highlight a higher non-GAAP figure (Bowen, Davis & Matsumoto 2005; Cameron, Percy & Stevenson-Clarke 2012; Guillamon-Saorin, Garcia Osma & Jones 2012; Marques 2010). This study combines both of the above definitions to determine 'bad news' companies. A dichotomous variable (*BAD*) was used, with companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, classified as bad news companies and given a value of 1. Companies reporting the same or an increase in GAAP profits (result must be a profit and not a loss) from the previous period are classified as good news companies and were given a value of 0.

5.7.2 Dependent Variables

5.7.2.1 Report/not report

For Research Question 1, the dependent variable (*REPORT*) is a dichotomous variable. The variable takes the value of 1 if the company reports a non-GAAP profit figure in any of the disclosure documents under investigation, and the value of 0 for companies that do not report a non-GAAP profit figure.

5.7.2.2 Impression management index

For Research Questions 3 and 4 the dependent variable *(RE)* is a ratio variable representing the relative emphasis given to non-GAAP figures compared to GAAP figures. The calculation of this score is explained in Section 5.6.2 with the dependent variable RE equal to the score for the non-GAAP figure minus the score for the GAAP figure.

5.8 Statistical Tests and Sample Selection

5.8.1 Descriptive Statistics

The data collected during phases one to four described above was recorded using *Microsoft Excel 2010* and analysed using *Microsoft Excel 2010* and *IBM SPSS Statistics 24*. Descriptive statistics were used to analyse the reporting of non-GAAP figures, and the use of impression management when reporting these figures, over the twelve-year period of the study. These included frequency statistics on industry and the independent and dependent variables. Graphical representations showing trends in non-GAAP and GAAP reporting, presence of reconciliations, and average impression management and relative emphasis scores were also produced.

Throughout this study results were reported as statistically significant if they were significant at the 0.05 level.

5.8.2 Research Question 1

Research Question 1 concerns the influence that specific firm characteristics have on the choice to report a non-GAAP profit figure, with Hypotheses 1 to 4 each relating to a characteristic. The dependent variable in this case was categorical, report or not report, and therefore multiple regression analysis was not considered appropriate. Instead, a non-parametric logistic regression was considered most appropriate to investigate this research question and its related hypotheses for the total sample and for each of the years in the study. The following model was developed:

Model 1:

$$REPORT = \beta_0 + \beta_1 SIZE + \beta_2 OWN + \beta_3 LEV + \beta_4 BAD + \epsilon$$

Where:
REPORT = Reporting of a non-GAAP profit figure: 1 if report, 0 if do not report
SIZE = Size of the organisation, as measured by log of market capitalisation
OWN = Ownership concentration, as measured by percentage shares owned by top twenty shareholders
LEV = Leverage, as measured by debt (total liabilities) to total assets
BAD = Bad news firm: 1 if decrease in IFRS profit from previous period or IFRS loss, 0 if same or increase in profit

A summary of the variables in this model is included in Table 5.1 after Section 5.8.4.

Each model was tested for significance. A Pearson Correlation Matrix was analysed to check for multicollinearity of the ratio independent variables. The existence of possible outlying cases was also investigated. Outliers are particular cases which are substantially different from the majority of other cases in the sample (Hair et al. 2013; Pallant 2013). Having values well above or below the majority of cases means their representativeness of the population may be an issue (Hair et al. 2013). The logistic models for the total sample, and for each year separately, were assessed for possible outliers by examining the standardised residuals, leverage values and Cook's distance. The standardised residual is a measure of the strength of the difference between observed and expected values. Standardised residuals have a mean of zero and a standard deviation of one. Hence, if residuals are normally distributed it is expected that 95% of the residuals will fall between 2 and -2 and cases outside these measures are considered outliers (Hair et al. 2013; Hosmer, Lemeshow & Sturdivant 2013). Leverage values measure how far an individual case deviates from the mean of that variable. For smaller samples, the leverage score is calculated as $3p/n$ where p is the number of independent variables plus one and n is the number of cases (Hair et al. 2013). Cook's distance is a measure of influence that combines information on the residual and leverage. It measures the impact individual cases have on the predictive value of the model as a whole (Allen & Bennett 2012). Larger values (values greater than 1) indicate the case has substantial influence in affecting the estimated regression coefficients (Hair et al. 2013). The model was run for each year with all cases included and then the influence of any potential outliers identified by any of the three methods described above was analysed. Outliers were removed for the analysis of Research Question 1.

5.8.3 Research Question 2

Research Question 2 concerns the influence specific events may have had on the decision to report a non-GAAP profit figure. A series of McNemar's tests were conducted to investigate the effect each of the events under investigation had on the number of firms reporting a non-GAAP profit figure. This test is a non-parametric test used to compare categorical variables recorded at two different times such as before and after an event or intervention. A t-test requires a continuous dependent variable and so was not suitable for this research question. The categorical variable for Research Question 2 was whether the company reports a non-GAAP profit or not (REPORT) and the test was used to determine if there was a significant change in this variable between two time periods, that is, whether the number of companies that changed their reporting behaviour in either direction was significant.

Hypothesis 5 concerns the introduction of IFRS in Australia. IFRS was not used by Australian companies in 2004. As explained in Section 4.5.5, the standards were effective from annual reporting periods commencing on or after 1 January 2005. The year 2005 was therefore a transition year for companies with a year-end other than 31 December. Although the annual report for these companies was still prepared under the previous regime, companies were to provide disclosures concerning the effect of IFRS adoption. IFRS had to be fully implemented in 2005 for year-end 31 December companies and in 2006 for other year-end companies. Of the 109 companies in the final sample, 14 had a year-end of 31 December. The other 95 companies would have had 2005 as a transition year. To explore the effect of this adoption period, three McNemar's tests were conducted to compare the years from 2004 to 2006.

Hypothesis 6 predicts that the number of companies reporting non-GAAP profit figures will increase during the GFC. The crisis began in the middle of 2007, reaching a peak in September 2008 with recovery beginning during 2009 (Reserve Bank of Australia 2010; Sinnewe, Harrison & Wijeweera 2017). For companies with a year-end of 30 June, the year 2009 contained the peak period of the GFC. Therefore 2007 is considered a lead up to the crisis and the years 2008 and 2009 are considered years of the crisis. To investigate this prediction, three McNemar's tests were conducted to compare the years from 2007 to 2009.

Hypothesis 7 concerns the issuance of the AICD and FINSIA guidelines in March 2009 concerning the reporting of underlying (non-GAAP) profit information. To investigate the effect of these guidelines three McNemar's tests were conducted to compare the years from 2008 to 2010.

Finally, Hypothesis 8 concerns the release of the ASIC released Regulatory Guide 230 *Disclosing non-IFRS financial information* and an accompanying Regulation Impact Statement in December 2011, and predicts there will be no effect from the release. Due to the date of its release it is expected that any effect there may have been will be seen in 2012. However, it is possible that some 2011 reports, particularly for companies with year-end of 31 December, may have been affected by the release of the Guide. To investigate this introduction period, McNemar's tests were conducted to compare the years from 2010 to 2012. Further, as previously discussed in Section 2.7, previous studies in the US found that there was an immediate reaction to the issuance by the SEC of Regulation G concerning non-GAAP financial measures in 2003 (Entwistle, Feltham & Mbagwu 2006a; Heflin & Hsu 2008; Jennings & Marques 2011; Kolev, Marquardt & McVay 2008; Marques 2006; Zhang & Zheng 2011). Studies found a decrease in the use of the figures (Entwistle, Feltham & Mbagwu 2006a; Marques 2006) and an increase in the quality of the exclusions made to calculate the figure (Frankel, McVay & Soliman 2011; Kolev, Marquardt & McVay 2008; Yi 2012). However, studies investigating beyond the initial post-regulation period report a sharp rise in the use of the figures in the years since regulation (Black et al. 2012; Brown et al. 2012). To investigate the ongoing effect of regulation in the Australian context, the years up to 2015 were included in the study and the results from these years were compared to the first year of the Regulatory Guide, 2012. A summary of the years investigated in Research Question 2 is provided in Table 5.2 after Section 5.8.5.

5.8.4 Research Question 3

Research Question 3 concerns whether the use of impression management tactics when reporting a non-GAAP profit figure compared to a GAAP profit figure is influenced by specific firm characteristics. The dependent variable in this question is the relative emphasis

score (RE) for impression management calculated during the fourth phase of the data collection. As the dependent variable in this case is a ratio number, a multiple regression was used to investigate this research question and its related hypotheses, employing the following model for each of the years in the study:

Model 2:

$$RE_{1\text{-}3} = \beta_0 + \beta_1 SIZE + \beta_2 OWN + \beta_3 LEV + \beta_4 BAD + \epsilon$$

Where:

RE_1 = Press release relative emphasis = emphasis score for non-GAAP profit figure in press releases – emphasis score for GAAP profit figure in press releases

RE_2 = Annual report relative emphasis = emphasis score for non-GAAP profit figure in annual reports – emphasis score for GAAP profit figure in annual reports

RE_3 = Total relative emphasis = total emphasis score for non-GAAP profit figure – total emphasis score for GAAP profit figure

SIZE = Size of the organisation, as measured by log of market capitalisation

OWN = Ownership concentration, as measured by percentage shares owned by top twenty shareholders

LEV = Leverage, as measured by debt (total liabilities) to total assets

BAD = Bad news firm: 1 if decrease in IFRS profit from previous period or IFRS loss, 0 if same or increase in profit

In order to provide comprehensive results concerning disclosure documents, three versions of this model were run for each year, one for relative emphasis in the press release, one for relative emphasis in the annual report and one for the total of both documents. As with Research Question 1, each model was tested for significance and the results of this test reported. Where models were not significant, the results for the hypotheses for that particular model were not reported. A Pearson Correlation Matrix and various tests for outliers were also performed for each year and the results analysed for any implications. The variance inflation factor (VIF) was also measured to assess multicollinearity. Outliers were removed for the analysis of Research Question 3. A summary of the variables for the two models used in this study is provided in Table 5.1 below.

Table 5.1: Summary of variables used in Models 1 and 2 for Research Questions 1 and 3

Variable	Predicted Direction		Variable Description
	Model 1 (RQ1)	Model 2 (RQ3)	
Independent Variables			
SIZE	+	+	Size measured as log of market capitalisation
OWN	-	-	Ownership concentration measured as percentage shares owned by top 20 shareholders
LEV	+	+	Leverage measured as total debt (liabilities) divided by total assets
BAD	+	+	Bad news companies: Coded 1 if GAAP profit < prior period or is a loss Coded 0 if GAAP profit ≥ prior period and is positive
Dependent Variables			
REPORT			Reported a non-GAAP figure: Coded 1 if non-GAAP figure reported Coded 0 if no non-GAAP figure reported
RE			Relative Emphasis score = Non-GAAP impression management score minus GAAP impression management score

5.8.5 Research Question 4

Research Question 4 concerns the influence specific events may have on the use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures. A series of independent t-tests were conducted to investigate the effect that each of the events under investigation had on the use of impression management in the press release, annual report and in total over both documents. T-tests were appropriate as the dependent variable was a continuous ratio number, the relative emphasis score. The number of companies reporting a non-GAAP figure changes each year as do some of the actual companies themselves. Each year's sample was therefore considered independent from any other year. The presence of possible outliers was also investigated using z scores which convert scores for variables to standard scores, with possible outliers being cases with a z score of <-3 or >3 (Seo 2006; Vijendra & Shivani 2014). Identified outliers were removed for the analysis of Research Question 4. The particular years used to test the hypotheses concerning each event are the same as those used and explained for Research Question 2 above. A summary of this information is contained in Table 5.2 below.

Table 5.2: Summary of specific events and years of analysis for Research Questions 2 and 4 and related hypotheses

Event	Year	Predicted Direction		Years Compared
		RQ2	RQ4	
Introduction of IFRS in Australia	2005 – transition year 2006 – fully implemented	+ (H5)	+ (H13)	2004-2005 2005-2006 2004-2006
Global Financial Crisis	Began late 2007 and continued to 2009	+ (H6)	+ (H14)	2007-2008 2008-2009 2007-2009
AICD and FINSIA Guidelines on Underlying Profit	Released in March 2009	+ (H7)	- (H15)	2008-2009 2009-2010 2008-2010
ASIC Regulatory Guide 230	Released in December 2011	no influence predicted (H8)	- (H16)	2010-2011 2011-2012 2010-2012 2012-2013 2012-2014 2012-2015

5.9 Summary

This chapter described the method employed to assess the research questions and to test the hypotheses in this study. Sample selection and data collection procedures were described and explained including a detailed explanation of the coding and calculation of the impression management index. Independent and dependent variables used to investigate the research questions and related hypotheses were described. The statistical tests employed in the study were also discussed. The results of these statistical tests along with descriptive statistics of the data collected will be presented in the next chapter.

Chapter 6

Results – The Reporting of Non-GAAP Profits in Australia

6.1 Introduction

The results of this study are presented in two separate chapters. This chapter presents the results for Research Questions 1 and 2 which concern the company characteristics and specific events that influence a company's decision to report non-GAAP profit figures. Descriptive statistics and results regarding the reporting of non-GAAP profit figures in Australia generally are provided in the chapter, while results for the use of impression management are reported in the next chapter. Section 6.2 provides an overview of the sample used in the study. Statistics, including industry sector statistics, and other information on the frequency, location and amount of non-GAAP profit figures reported by the sample companies over the period of the study are presented in Section 6.3. Results for Research Questions 1 and 2 and related hypotheses are then reported. Descriptive statistics concerning the variables used are reported in Section 6.4 and the results of the analysis are reported in Sections 6.5 and 6.6 respectively. The chapter concludes with a summary in Section 6.7.

6.2 Overview of Sample

The population used in this study is the Standard & Poor's ASX 200 Index as at 31 August 2015. From this population, 91 companies were eliminated as detailed in Section 5.3.3, leaving a study sample of 109 companies. Table 6.1 shows the industry sector of the sample companies classified by the first level of the Global Industry Classification Standard (GICS). The Consumer Discretionary sector has the highest representation with 19 companies (17.4% of total) followed by Materials with 18 companies (16.5%). The least represented sectors include Utilities with two companies and Information Technology and Telecommunications with three companies each. To ensure the results are current and relatable, this table includes the Real Estate sector, which was created in 2016. The eleven companies classified as Real Estate were previously classified as Financials before 2016. A detailed list of the final sample companies and their GICS industry sector is contained in Appendix 1.

Table 6.1: Industry sector membership of sample companies

Industry	n =	%
Energy	9	8.3
Materials	18	16.5
Industrials	15	13.8
Consumer Discretionary	19	17.4
Consumer Staples	8	7.3
Health Care	6	5.5
Financials	15	13.8
Information Technology	3	2.8
Telecommunication Services	3	2.8
Utilities	2	1.8
Real Estate	11	10
Total	109	100

Table 6.2 provides details on the size of the companies in the sample, as measured by market capitalisation. Although the Top 200 was used as the population in this study, the descriptive statistics in Table 6.2 indicate that the size of the companies in the sample varies greatly. In 2004, for example, the minimum market capitalisation was $5 million, and the maximum was $63.5 billion. In 2015, the last year of the study, the minimum market capitalisation was $198

Table 6.2: Market Capitalisation of Sample Companies

Year	Minimum ($mil)	Maximum ($mil)	Mean ($mil)	Standard Deviation ($mil)
2004	5	63,521	4,007	9,596
2005	4	62,962	4,851	10,912
2006	5	59,928	5,410	11,340
2007	6	71,825	6,780	13,412
2008	5	53,237	5,415	10,398
2009	2	78,161	5,842	13,425
2010	11	75,415	6,112	13,351
2011	100	81,625	6,062	12,860
2012	74	84,635	6,338	14,636
2013	160	111,696	7,707	19,095
2014	298	131,396	8,398	20,251
2015	198	138,911	8,634	20,399

million, and the maximum was $138.9 billion. The mean increased over the twelve-year period from $4 billion in 2004 to $8.6 billion in 2015. The standard deviation also increased

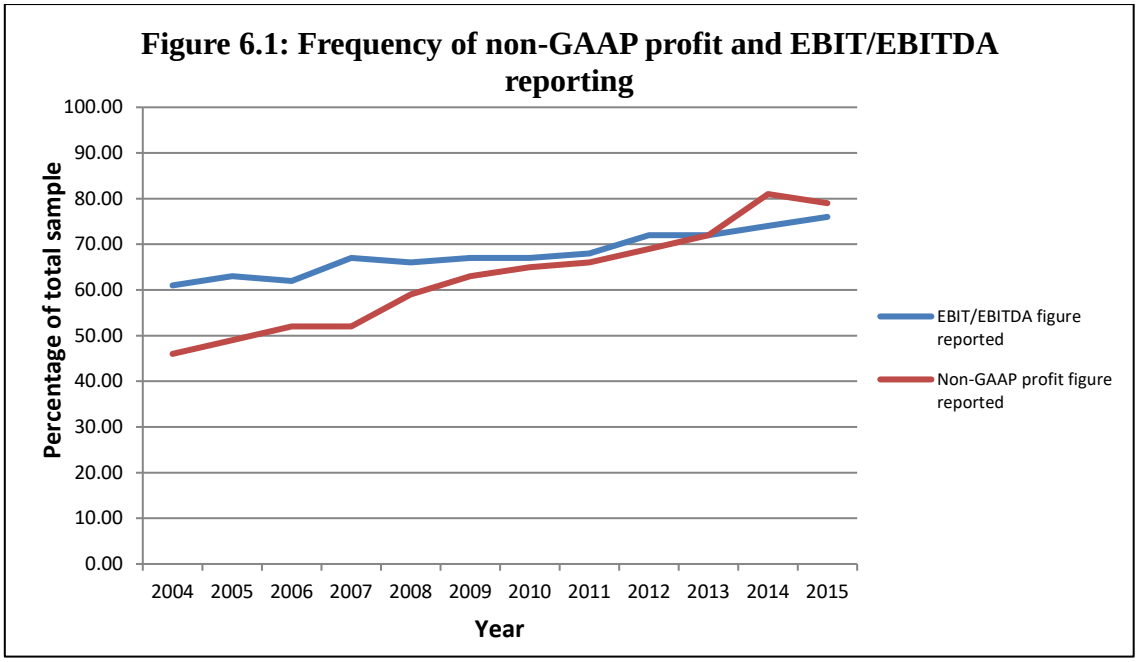
over the course of the twelve years, indicating that the market capitalisation figures for the sample companies are spread over an increasingly wider range. The next section provides a discussion of the initial findings regarding the phenomenon of non-GAAP profit reporting in the Australian context, and provides the background for the more in-depth discussion and analysis that follows.

6.3 Reporting of Non-GAAP Profits

As this study concerns the reporting of non-GAAP profit figures, an overview of such reporting across the sample is warranted. This section provides insights into the frequency of non-GAAP profit figures as well as EBIT/EBITDA figures and reports and analyses descriptive statistics for the industry sectors of the sample companies. It also provides information on the location and amount of non-GAAP profit figures disclosed in the sample documents, along with the terminology used when reporting such figures.

6.3.1 Frequency of Non-GAAP Profit Figures and EBIT/EBITDA

Figure 6.1 shows the trend in the percentage of companies from the total sample that reported a non-GAAP profit figure as compared to those reporting an EBIT/EBITDA figure (not included in the definition of non-GAAP profit figures in this study) over the twelve years of the study. The reporting of non-GAAP profit figures has generally increased steadily over the twelve years, with 50 companies (46%) reporting a figure in 2004 increasing to 86 companies (79%) in 2015. The year 2014 had the highest number of companies reporting a non-GAAP profit, with 88 (81%) of companies reporting a figure in that year. The reporting of EBIT/EBITDA results was more constant over the twelve-year period, ranging from 66 companies (61%) in 2004 to 83 (76%) in 2015. More companies reported EBIT/EBITDA figures than non-GAAP figures each year until the last three years of the study (2013 to 2015), where the number reporting a non-GAAP figure equalled or exceeded those reporting EBIT/EBITDA.



Reporting of these two types of figures is not mutually exclusive and several companies reported both types of figures each year . The results for frequency are also reported in tabular form in Appendix 4, which shows the number (and percentage of the total sample) of companies in the sample that reported a non-GAAP profit figure and the number that reported an EBIT/EBITDA figure for each year in the study.

6.3.2 Industry

Further insights into the frequency of reporting non-GAAP profit figures is provided by a breakdown of the results based on industry sector. Table 6.1 listed the number of companies in each GICS industry sector comprising the total sample for the study. Table 6.3 provides detailed statistics on how many of these companies reported non-GAAP profit figures and how many did not for each industry category for each year of the study. Panel A reports the number of companies in each industry that did not report a non-GAAP profit figure. Panel B of the table shows the number of companies in each industry reporting a non-GAAP profit figure each year with about 80% doing so in the final two years of the study. The total row shows that the overall number of companies reporting non-GAAP figures increased steadily over the twelve years from 50 out of 109 (46%) in 2004 to a high of 88 out of 109 (81%) in

Table 6.3: Descriptive statistics for industry sector according to GICS industry classification

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Panel A: Companies not reporting non-GAAP profit												
Energy (n=)	8	7	7	7	5	4	4	3	3	2	1	1
Materials (n=)	11	9	10	10	8	7	7	8	7	6	3	4
Industrials (n=)	9	10	10	10	7	7	7	5	4	4	3	2
Consumer Discretionary (n=)	9	11	10	7	7	7	6	5	9	8	6	5
Consumer Staples (n=)	4	4	3	6	6	4	4	5	3	2	1	2
Health Care (n=)	4	2	3	3	3	3	3	3	2	3	2	2
Financials (n=)	4	4	2	3	2	2	2	2	2	1	1	2
Information Technology (n=)	1	1	2	2	2	2	2	2	2	2	2	2
Telecommunication Services (n=)	3	1	2	2	3	3	2	3	1	2	1	2
Utilities (n=)	1	1	0	0	0	1	1	1	1	0	0	0
Real Estate (n=)	5	6	3	2	2	0	0	0	0	0	1	1
Total (n=)	59	56	52	52	45	40	38	37	34	30	21	23
Panel B: Companies reporting non-GAAP profit												
Energy (n=)	1	2	2	2	4	5	5	6	6	7	8	8
Materials (n=)	7	9	8	8	10	11	11	10	11	12	15	14
Industrials (n=)	6	5	5	5	8	8	8	10	11	11	12	13
Consumer Discretionary (n=)	10	8	9	12	12	12	13	14	10	11	13	14
Consumer Staples (n=)	4	4	5	2	2	4	4	3	5	6	7	6
Health Care (n=)	2	4	3	3	3	3	3	3	4	3	4	4
Financials (n=)	11	11	13	12	13	13	13	13	13	14	14	13
Information Technology (n=)	2	2	1	1	1	1	1	1	1	1	1	1
Telecommunication Services (n=)	0	2	1	1	0	0	1	0	2	1	2	1
Utilities (n=)	1	1	2	2	2	1	1	1	1	2	2	2
Real Estate (n=)	6	5	8	9	9	11	11	11	11	11	10	10
Total (n=)	50	53	57	57	64	69	71	72	75	79	88	86
Panel C: Companies reporting non-GAAP profit as percentage of total companies in each industry in sample												
Energy (%)	11	22	22	22	44	56	56	67	67	78	89	89
Materials (%)	39	50	44	44	56	61	61	56	61	67	83	78
Industrials (%)	40	33	33	33	53	53	53	67	73	73	80	87
Consumer Discretionary (%)	53	42	47	63	63	63	68	74	53	58	68	74
Consumer Staples (%)	50	50	63	25	25	50	50	38	63	75	88	75
Health Care (%)	33	67	50	50	50	50	50	50	67	50	67	67
Financials (%)	73	73	87	80	87	87	87	87	87	93	93	87
Information Technology (%)	67	67	33	33	33	33	33	33	33	33	33	33
Telecommunication Services (%)	0	67	33	33	0	0	33	0	67	33	67	33
Utilities (%)	50	50	100	100	100	50	50	50	50	100	100	100
Real Estate (%)	55	45	73	82	82	100	100	100	100	100	91	91

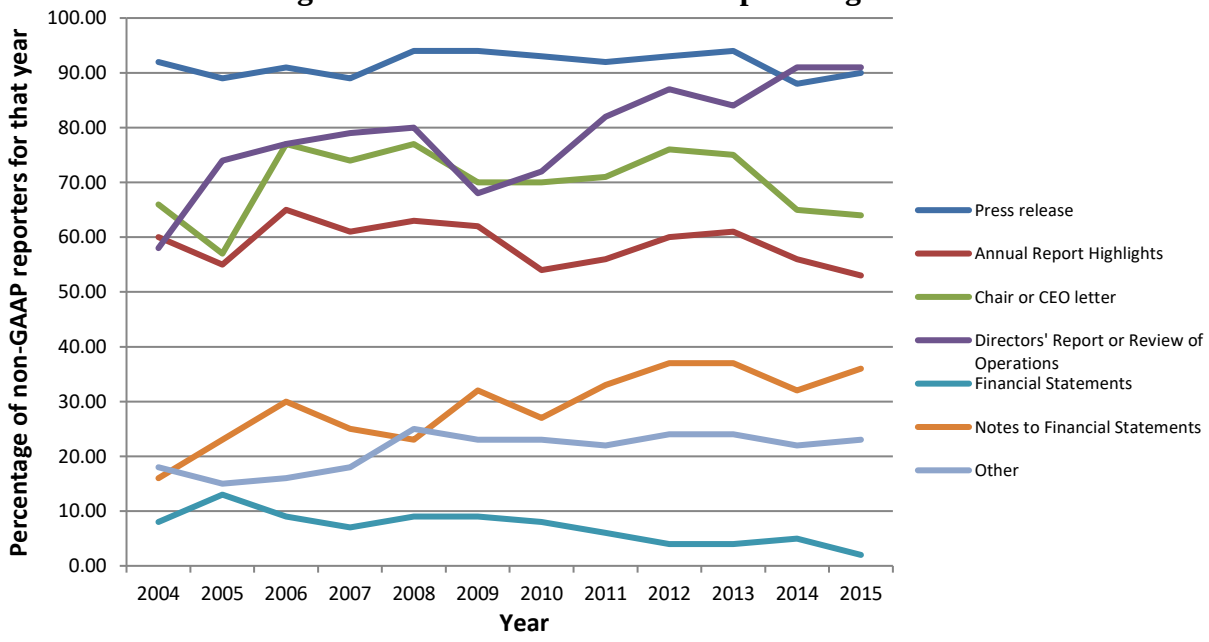
2014. Lastly, Panel C shows the non-GAAP reporters as a percentage of total companies in each industry in the sample.

Industries showing the largest increase in non-GAAP reporting companies over the twelve-year period include Energy, which increased from a low of one out of nine (11%) in 2004 to eight out of nine (89%) in 2014 and 2015 and Industrials, which increased from a low of five out of 15 companies (33%) in 2005-07 to 13 out of 15 (87%) in 2015. Industries that consistently had a high percentage of non-GAAP reporters over the twelve years include Financials, with its lowest years (2004 and 2005) still having 11 out of 15 companies (73%) reporting a non-GAAP figure. Real Estate (which was part of the Financials category until 2016) also had a consistently high number of non-GAAP reporters with all companies in this industry reporting a non-GAAP profit figure from 2009 to 2013 and 10 out of 11 reporting a figure in 2014 and 2015.

6.3.3 Location of Non-GAAP Profit Figures

Figure 6.2 shows trends in the locations of non-GAAP profit figures reported by companies in the sample. It indicates the percentage of companies reporting a non-GAAP profit in the press release and/or various sections of the annual report. The figure shows the number of reporting

Figure 6.2: Locaton of non-GAAP profit figures



companies using each location as a percentage of total non-GAAP reporters in that particular year (rather than the total companies in the sample). The number of companies reporting a figure in the various locations generally increased each year along with the overall trend of the increasing use of non-GAAP profits. However, Figure 6.2 shows that when expressed as percentages, the results for some locations such as the press release are reasonably consistent across the twelve years.

The press release is clearly the favoured location for reporting non-GAAP profits with between 88% and 94% of all companies that reported such a figure using this disclosure outlet. For example, in 2004, 46 of the 50 non-GAAP reporters for that year (or 92%) reported the figure in the press release. In 2015, 77 of the 86 non-GAAP reporters for that year (or 90%) reported the figure in the press release. It should be noted that not all companies in the sample issued annual results press releases. It was very uncommon for non-GAAP reporting companies to issue a press release and not report the non-GAAP figure in the document, with two companies at most doing so in some years.

Within the annual report, the Directors' Report or Review of Operations was the most favoured location most years, with a steady increase in disclosure in this section over the twelve years of the study. This is closely followed by the Chairman's or CEO letter and the highlights section at the beginning of the annual report, noting that not all annual reports have such a section. Reporting of non-GAAP figures in both these sections decreased after 2013. Very few companies reported the figure in the financial statements with the number ranging from 7 (13%) in 2005 to only 2 (2%) in 2015. However, reporting non-GAAP profit figures as part of the Notes to the financial statements increased in frequency over the twelve years. Sections of the annual report classified as 'other' include extra sections at the end of the annual report after the notes. Most commonly this was a five-year or ten-year summary table but also includes 'financial history' sections or a 'glossary'. The results for location are also shown in tabular form in Appendix 5, which shows the number of companies that report a non-GAAP figure in each location and the percentage of companies using each location as a percentage of total non-GAAP reporters in that particular year.

6.3.4 Terminology Used

Concerns have been raised as to the variety of terminology used by companies when reporting non-GAAP profit figures, which causes confusion for unsophisticated investors and shareholders when reading reports and comparing results across different companies (Brody & McDonald 2004; Heitger & Ballou 2003). During the second phase of the data collection, a record was made of the name given to the non-GAAP profit by each non-GAAP reporter for each year of the study. The names given varied greatly between companies, and within companies across the years. Figure 6.3 summarises the results of this analysis, grouping the terminology used by companies according to the key word/s in the term. The figure shows the percentage of companies using each term as a percentage of total non-GAAP reporters for each particular year in the study. These results are shown in tabular form in Appendix 6.

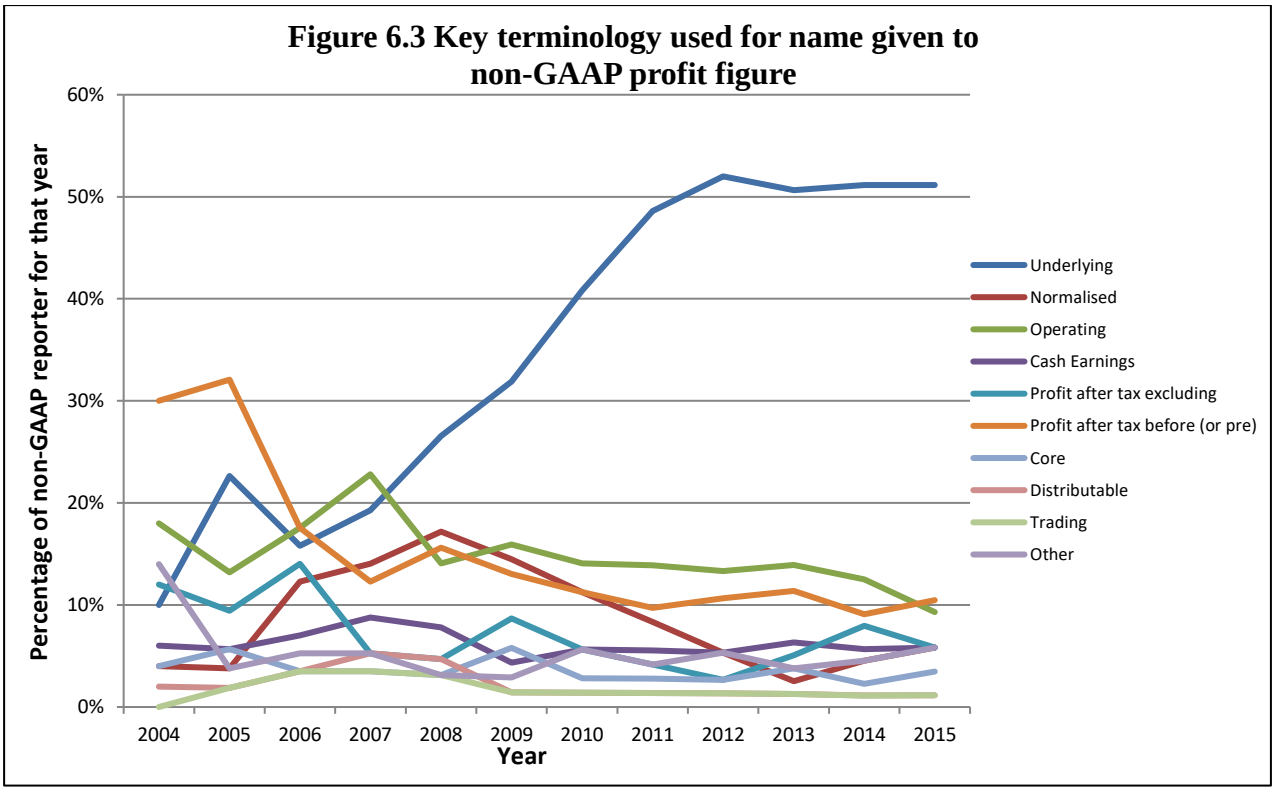
For ease of analysis, the many different terms companies used were grouped by a key word/s but there was some variety within each category. For example, 'net profit after tax before …' had a number of possible endings including:

- *significant items;*
- *non-recurring items;*
- *individually material items;*
- *noteworthy items;* and
- *tax consolidation.*

In 2004 and 2005 'profit after tax before' was the most common term used. Only five companies used the term 'underlying' in 2004. However, by 2015, 44 companies, or 51% of non-GAAP reporters for that year, used the term 'underlying' making it the most common term used in recent years. Using the term 'operating' has also been a common practice over the twelve-year period. Some of the more unusual terms categorised as 'other' in Figure 6.3 included:

- *net aggregated income;*
- *margin on services net profit after tax but before goodwill;*
- *adjusted group profit;*
- *earnings after tax and before noteworthy items;* and
- *insurance profit.*

Figure 6.3 Key terminology used for name given to non-GAAP profit figure



Reporting behaviour concerning the use of terminology also varied greatly between companies over the years. Some companies, such as Fairfax Media Ltd, consistently used the one term, 'underlying net profit after tax', for the entire twelve years. Others used up to five different terms over the twelve-year period, some using more than one term for the same figure in the same year. For example, Village Roadshow Ltd used the following terms at various times during the twelve years and also reported an EBITDA figure each year:

- *operating profit after tax excluding specific items and discontinuing operations;*
- *attributed profit after tax before specific items and discontinuing operations;*
- *profit after tax before material items and discontinued operations;*
- *operating profit after tax excluding one-off material items and discontinued operations;* and
- *normalised profit after tax.*

TPG Telecom Ltd only reported a non-GAAP figure in six of the twelve years but used a different term almost every year:

- *net profit after tax before goodwill;*
- *normalised earnings* AND *net profit after tax but before significant items* (both terms used in same year for the same figure)*;*

- *normalised net profit after tax;*
- *adjusted net profit after tax;* and
- *net profit after tax excluding intangible amortisation.*

Another practice noted in some companies was the use of more than one term to describe the same figure in the same year (as in the second bullet point above for TPG Telecom Ltd). Examples of the two (or three) terms used for the same figure in the same year include the following, with the 'AND' indicating the second term in use:

- *operating profit after tax* AND *underlying profit;*
- *operating pre-abnormal profit after tax and minority interests* AND *normalised profit after tax;*
- *profit after tax excluding non-core items* AND *profit after tax excluding significant items;*
- *profit after tax before significant items* AND *underlying profit after tax;*
- *underlying net profit after tax* AND *normalised profit;*
- *underlying net profit after tax* AND *net profit after tax but before specific non-recurring items;*
- *underlying profit* AND *profit after tax before provisions* AND *profit after tax before significant items;*
- *cash profit* AND *underlying profit;*
- *adjusted group profit* AND *underlying profit after tax;*
- *standalone net profit after tax* AND *net profit after tax excluding Jaya costs and earnings contribution;* (Note: 'Jaya costs' refers to costs associated with a takeover)
- *normal net profit after tax* AND *net profit after tax and before significant items;*
- *normalised net profit* AND *net profit before noteworthy items;*
- *normalised net profit before noteworthy items* AND *underlying normalised net profit from continuing operations;*
- *net profit after tax before exceptionals* AND *adjusted net profit after tax;*
- *net profit after tax for distribution to ordinary shareholders* AND *normalised, distributable net profit;*
- *net profit after tax excluding individually material items* AND *underlying profit;*
- *net profit after tax before non-recurring items* AND *normalised profit after tax;* and
- *net profit after tax from continuing operations* AND *reported after tax profit.*

The second label in the last bullet point is particularly concerning as this may appear to many readers of the reports to be the GAAP or IFRS profit.

The discussion above has concentrated on the disclosure of one particular non-GAAP figure by companies and the terminology used to report it. However, some companies reported a range of different figures with different names, all different from the GAAP profit figure. For

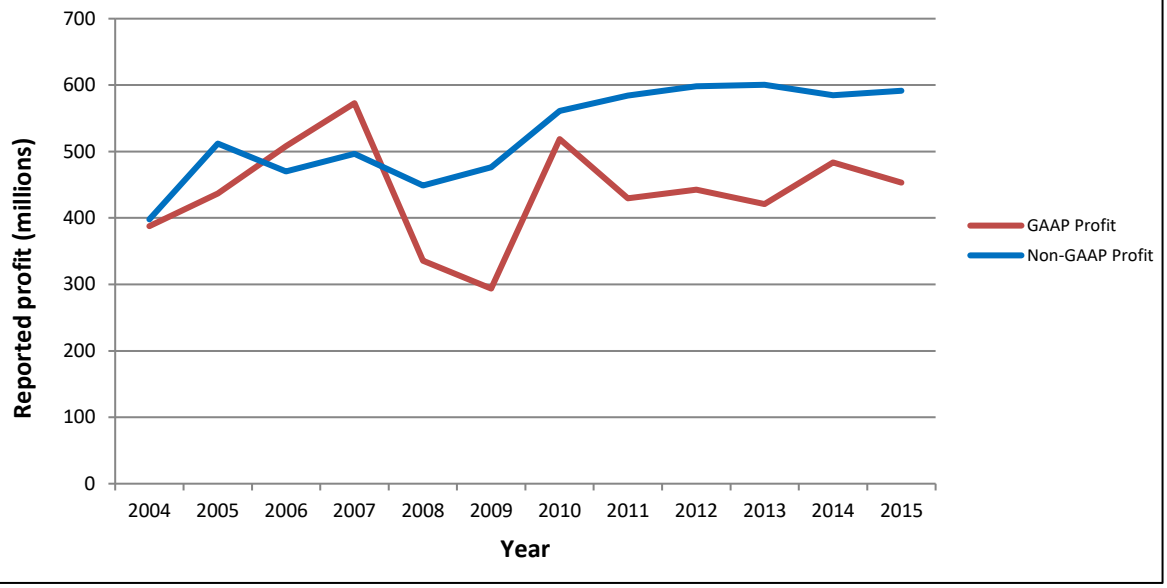
example, in 2005 the Bank of Queensland reported an underlying profit of $143.5 million and a net profit after tax excluding significant items of $76.2 million. In the same year Lend Lease Group reported a profit after tax excluding one-off items of $310.4 million and an underlying operating profit after tax of $281.6 million. In 2009, Invocare Ltd reported a normalised profit after tax of $33.5 million and an underlying profit AND operating profit after tax of $31.9 million. Adding to the ambiguity is the fact that many of these companies also reported EBIT and EBITDA figures as well as underlying EBIT and underlying EBITDA, with the amounts all differing to the other non-GAAP figures.

Although not common, instances where companies used the term ‘net profit after tax’ or ‘net profit’ to label what was a non-GAAP figure, as it differed from the GAAP profit reported in the income statement, are very concerning. For example, in 2011 and 2012, Cabcharge Australia Ltd reported a ‘normalised net profit after tax’ in the press release. In the annual report the same figure was called ‘profit after tax’ while the GAAP profit was called ‘reported profit after tax’. The various practices discussed in this section validate the concerns raised over the variety of terminology used by companies and highlight how these practices may cause confusion for unsophisticated investors and shareholders.

6.3.5 Amount of Non-GAAP Profit versus GAAP Profit

The difference in amounts between the reported non-GAAP and GAAP profits varied greatly between companies and within companies from year to year. The mean of the GAAP and non-GAAP profit figures, for companies reporting a non-GAAP profit, is shown in Figure 6.4. In all years except 2006 and 2007, the mean non-GAAP profit was higher than the mean GAAP profit. The largest differences between the means occurred in 2009 (a difference of $182.7 million) and 2013 (a difference of $179.8 million). The smallest difference was in 2004 with a difference of just $10 million between the two means. It is interesting to note that the mean non-GAAP figure appeared to remain reasonably consistent after the introduction of the ASIC Regulatory Guide in December 2011.

Figure 6.4: Average profit figures for non-GAAP reporters



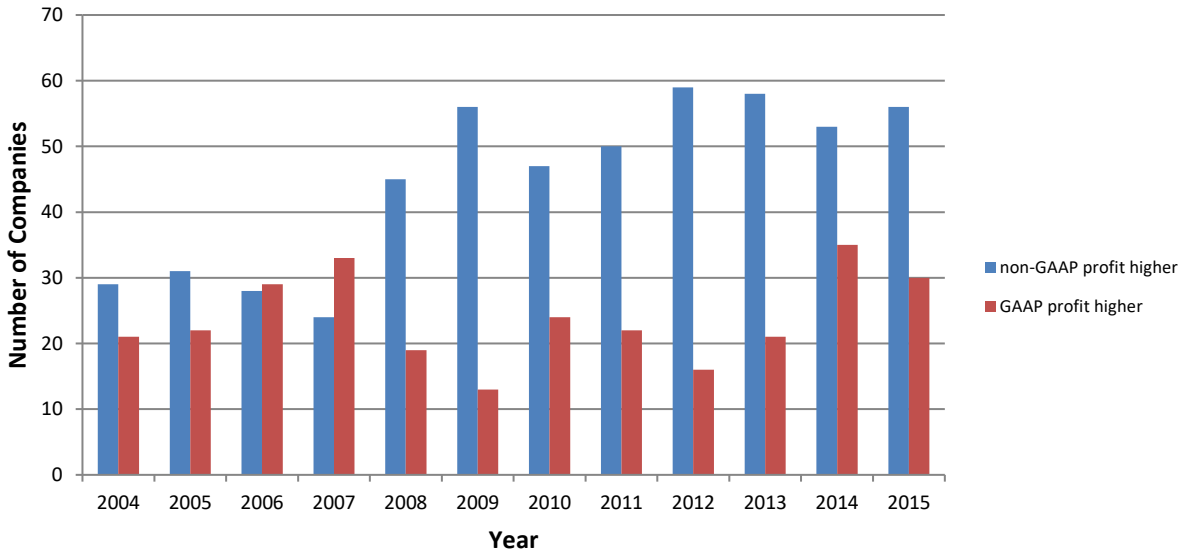
When considering individual companies, the difference between the two figures varies greatly. In some years, some companies labelled the exact same figure as both a non-GAAP and GAAP figure, meaning the difference between the two was nil. In 2008 for example, four companies reported the same figure as both a GAAP and non-GAAP profit. This will be the case if the company is using the same 'definition' of non-GAAP profit each year and in that particular year there were no significant or unusual items. In contrast, one example of a large difference between the two figures is provided by the GPT Group, a member of the Real Estate sector, which in 2008 reported a GAAP loss of $3,254 million but a non-GAAP profit of $469 million, a difference of $3.7 billion. A reconciliation of the two figures was provided by the company and showed that the difference between the two figures was due to changes in the value of the investment portfolio, goodwill impairment, and unrealised losses on derivatives and foreign exchange losses on borrowings. Another example of a large difference between the figures is Santos Ltd (a member of the Energy sector) in 2015, with a GAAP loss of $2,698 million and a non-GAAP profit of $50 million, a difference of $2.7 billion explained as after tax impairment losses.

In reviewing individual industry sectors, companies from Financials and Real Estate represented the majority of companies where the non-GAAP profit exceeded the GAAP profit by the greatest amount for most years of the study. The years 2011, 2014 and 2015 were

exceptions to this with the Energy and Materials sector having the majority of companies where non-GAAP exceeded GAAP by the greatest amount. Interestingly, the Real Estate sector also had the most companies where the GAAP profit exceeded the non-GAAP profit by the greatest amount in the majority of years in the study.

Although the mean non-GAAP profit exceeded the mean GAAP profit in all but two years of the study (Figure 6.4), there were **c**ompanies that, on an individual company basis, reported a higher GAAP profit. Figure 6.5 illustrates which figure, GAAP or non-GAAP, was the higher for each of the companies which reported a non-GAAP figure. In 2004, there were 29 companies where the non-GAAP figure exceeded the GAAP figure and 21 where the GAAP figure was higher, a difference of eight companies. The years 2006 and 2007 were the only years in the study where the number of companies reporting a higher GAAP figure exceeded

Figure 6.5: Companies reporting higher non-GAAP or GAAP figures



the number of companies reporting a higher non-GAAP figure. This correlates with the years where the mean GAAP profit was higher than the mean non-GAAP profit as seen in Figure 6.4.

During 2008 and 2009, the years of the GFC, the number of companies where the non-GAAP profit figure was the higher figure far exceeded those where GAAP profit figure was higher. In 2009, for example, 56 companies reported a higher non-GAAP profit figure with only 13 reporting a higher GAAP profit figure. The years 2009 and 2012 show the greatest difference with 43 more companies having a higher non-GAAP profit figure than the companies where the GAAP profit figure was higher. From an individual industry sector perspective, Health Care, Information Technology and Telecommunications were industries where almost all the companies reporting a non-GAAP figure reported one higher than the GAAP figure (note that these three sectors had a small representation in the total sample).

6.4 Descriptive Statistics

6.4.1 Independent Variables

Table 6.4 shows descriptive statistics for the independent variables for Research Question 1 and its accompanying hypotheses. A more detailed version of this table showing quartiles is provided in Appendix 7. Each panel in Table 6.4 shows the mean and standard deviation for each year of the study for each of the independent variables. The table shows the division between companies that did not report a non-GAAP profit and companies that did report a non-GAAP profit and reports the statistics for the total companies in the sample. Panel A provides the descriptive statistics for the size of the company. Over the years investigated in the study, the mean size of all companies in the sample, as measured by the log of market capitalisation, increased from the lowest result in 2004 ($\overline{x}_{2004}$ = 8.8734) to the highest result in 2015 ($\overline{x}_{2015}$ = 9.4233). In each year of the study, the companies reporting a non-GAAP profit are, on average, larger than companies that did not. Univariate results show this difference is statistically significant at the 0.05 level for each year except 2013 to 2015, see Appendix 8 for these results.

Panel B provides the descriptive statistics for ownership concentration as measured by the percentage of shares owned by the top 20 shareholders. As with size, the mean ownership concentration for all companies increased over the course of the years involved, ranging from the lowest result in 2005 ($\overline{x}_{2005}$ = 61.61%) to the highest in 2015 ($\overline{x}_{2015}$ = 73.44%). When comparing the means of companies that did and did not report a non-GAAP profit, the results

Table 6.4: Descriptive statistics for independent variables for Research Question 1

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Panel A: SIZE (log of market capitalisation)												
Companies not reporting non-GAAP profit												
Mean	8.5490	8.6579	8.8094	9.0086	8.8844	8.7502	8.8893	9.0283	9.1120	9.2790	9.3053	9.3998
Standard Deviation	0.8985	0.8615	0.8908	0.9065	1.0006	0.8757	0.7856	0.6855	0.5198	0.5426	0.5475	0.6056
Companies reporting non-GAAP profit												
Mean	9.2562	9.3591	9.4095	9.5179	9.3302	9.3531	9.4210	9.4228	9.3650	9.3790	9.4505	9.4295
Standard Deviation	0.7118	0.7207	0.5941	0.5495	0.6001	0.6640	0.5847	0.5484	0.6291	0.6228	0.5775	0.6060
All companies												
Mean	8.8734	8.9988	9.1232	9.2749	9.1461	9.1318	9.2356	9.2889	9.2861	9.3515	9.4225	9.4233
Standard Deviation	0.8881	0.8672	0.8052	0.7860	0.8165	0.7998	0.7055	0.6242	0.6063	0.6010	0.5722	0.6032
Panel B: OWN (ownership concentration = percentage shares owned by top twenty shareholder)												
Companies not reporting non-GAAP profit												
Mean	61.47	60.55	65.32	65.51	68.61	68.80	67.69	68.64	73.73	75.11	77.42	75.78
Standard Deviation	16.68	16.19	17.37	16.76	14.75	13.71	14.15	14.01	12.26	13.64	10.00	12.61
Companies reporting non-GAAP profit												
Mean	62.38	62.73	60.08	62.87	62.55	64.64	68.04	70.21	69.56	69.87	71.87	72.82
Standard Deviation	19.17	18.70	17.05	17.93	17.31	15.64	14.75	14.34	14.18	13.83	14.11	14.36
All companies												
Mean	61.89	61.61	62.58	64.13	65.05	66.17	67.92	69.68	70.86	71.31	72.94	73.44
Standard Deviation	17.79	17.41	17.32	17.35	16.51	15.03	14.48	14.18	13.69	13.91	13.56	14.00
Panel C: LEV (leverage = total liabilities to total assets)												
Companies not reporting non-GAAP profit												
Mean	0.4186	0.4468	0.4549	0.4703	0.4310	0.4202	0.4374	0.4220	0.4126	0.4173	0.3954	0.4112
Standard Deviation	0.2137	0.2321	0.2148	0.2258	0.2481	0.2458	0.2287	0.2000	0.2264	0.1872	0.2160	0.1979
Companies reporting non-GAAP profit												
Mean	0.5551	0.5563	0.6280	0.6097	0.5994	0.5453	0.5251	0.5273	0.5405	0.5389	0.5173	0.5242
Standard Deviation	0.2101	0.2100	0.2079	0.2057	0.1990	0.2222	0.2253	0.2199	0.2051	0.1992	0.1927	0.2014
All companies												
Mean	0.4818	0.5000	0.5454	0.5432	0.5299	0.4994	0.4945	0.4916	0.5006	0.5055	0.4938	0.5004
Standard Deviation	0.2219	0.2274	0.2275	0.2256	0.2348	0.2378	0.2293	0.2182	0.2192	0.2026	0.2022	0.2050

Table 6.4: Descriptive statistics for independent variables for Research Question 1 (continued)

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Panel D: BAD (bad news firm = decrease in GAAP profit or GAAP loss, good news firm = same or increase in profit)												
Companies not reporting non-GAAP profit												
Bad News Companies n (%)	19 (32)	17 (30)	17 (33)	21 (40)	21 (47)	19 (48)	12 (32)	12 (32)	13 (38)	7 (23)	8 (38)	6 (26)
Good News Companies n (%)	40 (68)	39 (70)	35 (67)	31 (60)	24 (53)	21 (52)	26 (68)	25 (68)	21 (62)	23 (77)	13 (62)	17 (74)
Total n (%)	59 (100)	56 (100)	52 (100)	52 (100)	45 (100)	40 (100)	38 (100)	37 (100)	34 (100)	30 (100)	21 (100)	23 (100)
Companies reporting non-GAAP profit												
Bad News Companies n (%)	6 (12)	17 (32)	17 (30)	13 (23)	35 (55)	45 (65)	13 (18)	36 (50)	43 (57)	35 (44)	31 (35)	38 (44)
Good News Companies n (%)	44 (88)	36 (68)	40 (70)	44 (77)	29 (45)	24 (35)	58 (82)	36 (50)	32 (43)	44 (56)	57 (65)	48 (56)
Total n (%)	50 (100)	53 (100)	57 (100)	57 (100)	64 (100)	69 (100)	71 (100)	72 (100)	75 (100)	79 (100)	88 (100)	86 (100)
All companies												
Bad News Companies n (%)	25 (23)	34 (31)	34 (31)	34 (31)	56 (51)	64 (59)	25 (23)	48 (44)	56 (51)	42 (39)	39 (36)	44 (40)
Good News Companies n (%)	84 (77)	75 (69)	75 (69)	75 (69)	53 (49)	45 (41)	84 (77)	61 (56)	53 (49)	67 (61)	70 (64)	65 (60)
Total n (%)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)

year by year are varied. In eight of the twelve years, the mean ownership concentration of companies reporting a non-GAAP profit was lower, meaning that in those years, on average, non-GAAP reporters had more dispersed ownership. This mean difference was statistically significant at the 0.05 level in 2008, 2013 and 2014 (Appendix 8).

Panel C reports the descriptive statistics for leverage as measured by total liabilities to total assets. The mean leverage for all companies in the study did not vary greatly over the years and was the highest in 2006 ($\overline{x}_{2006}$ = 0.5454) and 2007 ($\overline{x}_{2007}$ = 0.5432). When comparing the companies that did and did not report a non-GAAP figure, those that reported a figure were more highly leveraged, on average, in every year of the study. This result was statistically significant for every year of the study (Appendix 8).

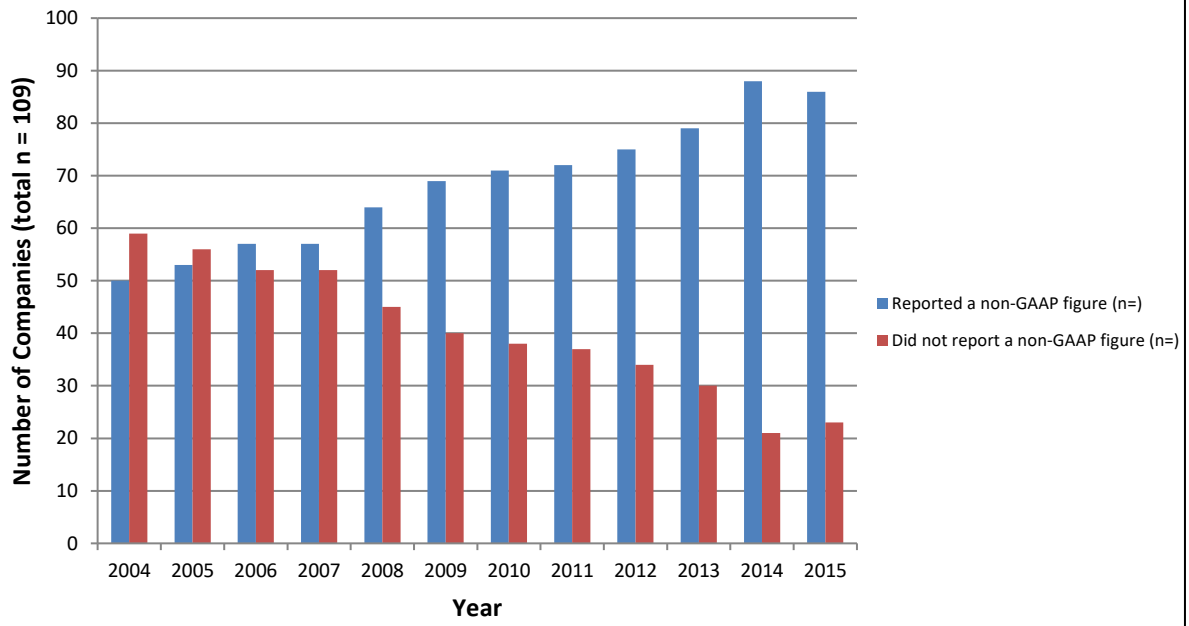
In Panel D, the numbers of companies classified as 'bad news' companies or 'good news' companies are reported along with percentages. In this study, bad news companies in a particular year are those that reported a lower GAAP profit than the previous period or reported a GAAP loss (see Section 5.7.1.4). Overall, the number of bad news companies increased greatly in 2008 (56 companies or 51.4% of the sample) and 2009 (64 companies or 58.7% of the sample), the two years of the GFC. The year 2012 also saw a large increase in 'bad news' companies with 56 companies or 51.4% matching the definition. The years 2004 and 2010 had the lowest number of bad news companies with 25 companies or 22.9% of the sample in each of these years. The breakdown of the numbers between companies that did and did not report a non-GAAP profit provides mixed results, particularly in the early years. However, non-GAAP reporting companies had a higher percentage of bad news companies in six of the eight years since 2008.

While there are four independent variables for Research Question 1, Research Question 2 has only one, a categorical variable representing the particular year in question. Research Question 2 explores the effect certain events may have had on the decision by companies to report or not report a non-GAAP profit figure. Analysis therefore involves changes between the particular years involving these events.

6.4.2 Dependent Variables

The dependent variable for both Research Questions 1 and 2 is whether or not the company reported a non-GAAP profit figure. An overview of this variable in the sample is presented graphically in Figure 6.6 with the full detail in Table 6.5, reflecting the number and percentages of companies that reported a non-GAAP profit and those that did not in each of the years of the study. The number of companies reporting a non-GAAP figure rose steadily over the period of the study from 50 companies (or 45.9%) in 2004 to a high of 88 companies (or 80.7%) in 2014. This means of the 109 companies in the sample, only 21 or 19.3% did not report a non-GAAP figure in 2014. The reporting of this type of figure has therefore become common place in recent years.

Figure 6.6: Companies reporting non-GAAP profits



The descriptive statistics above provide an overview of the variables used to analyse Research Questions 1 and 2. The results of the analysis of these two research questions is now presented.

Table 6.5: Descriptive statistics for dependent variable for Research Questions 1 and 2

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
REPORT (reporting of a non-GAAP profit figure)												
Reported a non-GAAP figure n (%)	50 (46)	53 (49)	57 (52)	57 (52)	64 (59)	69 (63)	71 (65)	72 (66)	75 (69)	79 (72)	88 (81)	86 (79)
Did not report a non-GAAP figure n (%)	59 (54)	56 (51)	52 (48)	52 (48)	45 (41)	40 (37)	38 (35)	37 (34)	34 (31)	30 (28)	21 (19)	23 (21)
Total n (%)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)

6.5 Research Question 1 – Influence of Company Characteristics on Non-GAAP Reporting

6.5.1 General Overview

Research Question 1 concerns whether specific firm characteristics influence a company's choice to report non-GAAP profit figures. As the dependent variable (REPORT) is categorical, the company either did or did not report a non-GAAP profit figure, logistic regression analysis was used to evaluate Model 1:

Model 1:

$$REPORT = \beta_0 + \beta_1 SIZE + \beta_2 OWN + \beta_3 LEV + \beta_4 BAD + \epsilon$$

Where:
REPORT = Reporting of a non-GAAP profit figure: 1 if report, 0 if do not report
SIZE = Size of the organisation, as measured by log of market capitalisation
OWN = Ownership concentration, as measured by percentage shares owned by top twenty shareholders
LEV = Leverage, as measured by total liabilities to total assets
BAD = Bad news firm: 1 if decrease in IFRS profit from previous period or IFRS loss, 0 if same or increase in profit

The model was tested for collinearity, the presence of outliers and for significance of the model itself. All models were statistically significant for Research Questions 1.

Pearson's Correlation Matrices of the three independent continuous variables are presented in Appendix 9. Leverage is significantly positively related to size in the total sample and all the individual years ($p < 0.01$ for total sample and all years). Leverage is significantly negatively related to ownership concentration in the total sample and in all the years from 2007 to 2015 ($p < 0.05$ for 2007, 2009 and 2010; $p < 0.01$ for total sample and for 2008 and 2011 to 2015). Size and ownership concentration are significantly negatively related in 2014 ($p < 0.01$) and 2015 ($p < 0.05$).

The model was assessed for possible outliers using Cook's distance, leverage and standardised residuals (see Section 5.8.2). Appendix 10 provides details of the outliers removed from the analysis of the total sample. It lists the company name, industry sector, year and results from the three tests used to determine outliers. Appendix 11 provides similar details of the outliers removed from the analysis of each individual year of the study.

The logistic regression model was first applied to the total sample of companies over the twelve years of the study. The model was significant, χ^2 (4, n = 1237) = 323.970, $p < 0.01$, and the results are shown in Table 6.6 and discussed below under each hypothesis.

Table 6.6: Logistic Regression Analysis of Reporting of non-GAAP Figures as a Function of Company Characteristic – Total Sample

	Predicted Sign	Coefficient	Standard Error	Wald Test (ζ-ratio)	*p* Value[a]
Model Reliability: $R^2 = 0.230$, χ^2 (4, n = 1237) = 323.970, $p = 0.000$					
Size	+	1.557	0.139	124.606	**0.000****
Ownership Concentration	-	-0.005	0.005	1.048	0.157
Leverage	+	0.023	0.004	34.009	**0.000****
Good/Bad News Year	+	0.793	0.149	28.285	**0.000****
Constant		-14.528	1.236	138.181	0.000

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

Logistic regression analysis was then conducted for each individual year of the study to determine if the results changed from year to year, with these finding included in the results under each hypothesis. This identified whether different company characteristics were more or less influential depending on the year in question. The models for each year were significant. The results are presented in Table 6.7 with each year's results, including the model reliability, reported in a separate panel of the table.

6.5.2 Hypothesis 1

Hypothesis 1 predicted that larger companies are more likely to report non-GAAP profits than smaller companies due to increased information asymmetry arising from more complexity and a wider ownership base. For the total sample, see Table 6.6, size was statistically significant and in the predicted direction ($\zeta = 124.606$, $p < 0.01$).

When the model was assessed on a year by year basis, size was statistically significant and in the predicted direction for all the years of the study except 2008 and 2013 to 2015, see Table 6.7. Therefore, for the total sample and in almost every year individually, size is a contributing factor to the decision to report a non-GAAP profit figure with larger companies more likely to

Table 6.7: Logistic Regression Analysis of Reporting of non-GAAP Figures as a Function of Company Characteristic

	Predicted Sign	Coefficient	Standard Error	Wald Test (ζ-ratio)	*p* Value[a]
Panel A: 2004					
Model Reliability: $R^2 = 0.229$, $\chi^2(4, n = 105) = 27.315$, $p = 0.000$					
Size	+	1.117	0.362	9.524	**0.001****
Ownership Concentration	-	0.008	0.013	0.315	0.287
Leverage	+	0.015	0.013	1.272	0.130
Good/Bad News Year	+	-1.057	0.594	3.162	**0.038***
Constant		-11.080	3.231	11.756	0.001
Panel B: 2005					
Model Reliability: $R^2 = 0.234$, $\chi^2(4, n = 106) = 28.225$, $p = 0.000$					
Size	+	1.557	0.400	15.165	**0.000****
Ownership Concentration	-	0.013	0.013	0.963	0.163
Leverage	+	-0.003	0.013	0.066	0.399
Good/Bad News Year	+	0.610	0.513	1.415	0.117
Constant		-14.975	3.510	18.200	0.000
Panel C: 2006					
Model Reliability: $R^2 = 0.237$, $\chi^2(4, n = 106) = 28.732$, $p = 0.000$					
Size	+	1.099	0.391	7.899	**0.002****
Ownership Concentration	-	-0.026	0.014	3.195	**0.037***
Leverage	+	0.024	0.013	3.360	**0.034***
Good/Bad News Year	+	0.010	0.495	0.000	0.492
Constant		-9.478	3.426	7.655	0.006
Panel D: 2007					
Model Reliability: $R^2 = 0.199$, $\chi^2(4, n = 105) = 23.333$, $p = 0.000$					
Size	+	1.001	0.420	5.666	**0.009****
Ownership Concentration	-	-0.012	0.014	0.723	0.198
Leverage	+	0.021	0.013	2.654	0.051
Good/Bad News Year	+	-0.674	0.508	1.762	0.092
Constant		-9.249	3.707	6.225	0.013
Panel E: 2008					
Model Reliability: $R^2 = 0.216$, $\chi^2(4, n = 106) = 25.769$, $p = 0.000$					
Size	+	0.415	0.362	1.313	0.126
Ownership Concentration	-	-0.017	0.014	1.446	0.115
Leverage	+	0.040	0.013	8.896	**0.002****
Good/Bad News Year	+	0.809	0.473	2.927	**0.044***
Constant		-4.601	3.197	2.071	0.150
Panel F: 2009					
Model Reliability: $R^2 = 0.391$, $\chi^2(4, n = 101) = 50.168$, $p = 0.000$					
Size	+	2.301	0.591	15.155	**0.000****
Ownership Concentration	-	-0.038	0.020	3.411	**0.033***
Leverage	+	0.042	0.016	6.789	**0.005****
Good/Bad News Year	+	1.910	0.644	8.804	**0.002****
Constant		-20.105	5.197	14.967	0.000
Panel G: 2010					
Model Reliability: $R^2 = 0.270$, $\chi^2(4, n = 103) = 32.377$, $p = 0.000$					
Size	+	2.203	0.564	15.262	**0.000****
Ownership Concentration	-	0.005	0.018	0.081	0.388
Leverage	+	0.022	0.014	2.510	0.057
Good/Bad News Year	+	-0.186	0.612	0.092	0.381
Constant		-20.472	5.207	15.459	0.000
Panel H: 2011					
Model Reliability: $R^2 = 0.303$, $\chi^2(4, n = 104) = 37.610$, $p = 0.000$					
Size	+	1.885	0.561	11.287	**0.000****
Ownership Concentration	-	0.011	0.019	0.345	0.279
Leverage	+	0.048	0.018	7.339	**0.004****
Good/Bad News Year	+	1.944	0.632	9.461	**0.001****
Constant		-20.068	5.267	14.519	0.000

Table 6.7: Logistic Regression Analysis of Reporting of non-GAAP Figures as a Function of Company Characteristic (continued)

	Predicted Sign	Coefficient	Standard Error	Wald Test (ζ-ratio)	*p* Value[a]
Panel I: 2012					
Model Reliability: $R^2 = 0.307$, $\chi^2(4, n = 101) = 37.072$, $p = 0.000$					
Size	+	1.268	0.666	3.627	**0.029***
Ownership Concentration	-	-0.024	0.024	0.999	0.159
Leverage	+	0.062	0.019	10.778	**0.000****
Good/Bad News Year	+	1.695	0.622	7.422	**0.003****
Constant		-12.005	5.911	4.125	0.042
Panel J: 2013					
Model Reliability: $R^2 = 0.254$, $\chi^2(4, n = 101) = 29.648$, $p = 0.000$					
Size	+	-0.778	0.726	1.147	0.142
Ownership Concentration	-	-0.051	0.025	4.000	**0.023***
Leverage	+	0.067	0.022	9.260	**0.001****
Good/Bad News Year	+	2.411	0.795	9.194	**0.001****
Constant		8.610	6.577	1.714	0.191
Panel K: 2014					
Model Reliability: $R^2 = 0.280$, $\chi^2(4, n = 100) = 32.909$, $p = 0.000$					
Size	+	2.179	1.367	2.540	0.055
Ownership Concentration	-	-0.139	0.055	6.305	**0.006****
Leverage	+	0.146	0.045	10.784	**0.000****
Good/Bad News Year	+	-0.754	0.797	0.895	0.172
Constant		-12.013	11.131	1.165	0.281
Panel L: 2015					
Model Reliability: $R^2 = 0.246$, $\chi^2(4, n = 100) = 28.257$, $p = 0.000$					
Size	+	0.011	0.939	0.000	0.496
Ownership Concentration	-	0.033	0.029	1.252	0.132
Leverage	+	0.070	0.029	5.894	**0.008****
Good/Bad News Year	+	19.852	6052.733	0.000	0.499
Constant		-4.121	7.786	0.280	0.597

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

report such a figure than smaller companies. Hypothesis 1 is supported for the total sample and in all the individual years except 2008 and 2013 to 2015.

6.5.3 Hypothesis 2

Hypothesis 2 concerned ownership concentration and predicted that companies with dispersed ownership are more likely to report non-GAAP profit figures than companies with concentrated ownership. Ownership concentration was not significant for the total sample when assessed as a whole, see Table 6.6. However, when the years were considered individually, it was statistically significant and in the predicted direction in four of the twelve years of the study. These years are 2006, 2009, 2013 and 2014, see Table 6.7. Therefore, Hypothesis 2 is supported for one third of the years of the study.

6.5.4 Hypothesis 3

Hypothesis 3 concerned the influence the extent of a company's leverage might have on the decision to report a non-GAAP profit and predicted that more highly leveraged companies were more likely to report such figures. Results for leverage were statistically significant and in the predicted direction for the total sample, see Table 6.6, ($z = 34.009$, $p < 0.01$). The results for the individual years vary across the study with the variable being significant in all the later years of the study (from 2011). The variable is statistically significant in 2006, 2008, 2009, and 2011 to 2015, see Table 6.7. All results are in the predicted direction meaning that more highly leveraged companies are more likely to report a non-GAAP figure in the years where leverage is significant. Hypothesis 3 is therefore supported for the total sample and for eight of the twelve individual years of the study.

6.5.5 Hypothesis 4

Hypothesis 4 concerns 'bad news' companies and whether managers have more incentive to report extra information such as non-GAAP profits in order to bond themselves to agents in bad years. A 'bad news' company was defined as a company reporting a decrease in GAAP profits from the previous period, or a GAAP loss. It was predicted that such companies are more likely to report non-GAAP profit figures than companies reporting an increase in GAAP profits ('good news' companies). The results show that being a 'bad news' company had a significant influence on the decision to report a non-GAAP profit for the total sample, see Table 6.6, ($z = 28.285$, $p < 0.01$). On an individual year basis, being a 'bad news' company was a significant contributing factor in 2004 but not in the predicted direction, see Table 6.7. It was statistically significant and in the predicted direction in 2008 and 2009, the years of the GFC. It was also statistically significant and in the predicted direction in 2011 to 2013, the years immediately following the release of the ASIC Regulatory Guide 230. Therefore, Hypothesis 4 is supported for the total sample and in five of the twelve years of the study.

6.6 Research Question 2 – Influence of Specific Events on Non-GAAP Reporting

6.6.1 General Overview

Research Question 2 concerns whether specific events influence a company's choice to report non-GAAP profit figures. To investigate this research question, a series of McNemar's tests were conducted to establish if the reporting behaviour of companies in the sample concerning non-GAAP profits changed significantly between certain years surrounding the events in question. The McNemar's test is a non-parametric test which compares changes in categorical variables, in this case the variable REPORT. Companies were deemed to have reported a non-GAAP figure if they had done so at least once in any of the documents under investigation. The results are presented in crosstabs tables which show companies whose reporting behaviour did and did not change between two time periods. The McNemar's test recognises that a change in behaviour could be in either direction, from 'did not report' to 'did report', or from 'did report' to 'did not report'. The number of companies that changed behaviour either way, the discordant pairs in the crosstabs table, is then measured for significance. If the number of companies that have changed their behaviour in one direction is similar or equal to those who changed in the other direction, the event in question had no influence on behaviour and the results will not be statistically significant. If there is a direction in the movement between the years, that is, the discordant pairs are significantly different to each other; the overall result will be statistically significant. The results for this research question are discussed below under each hypothesis and presented in tables within each section.

6.6.2 Hypothesis 5

Hypothesis 5 concerned the introduction of IFRS and predicted that the number of companies reporting non-GAAP profit figures would increase with the introduction of IFRS in Australia. It was argued that the introduction of IFRS would have caused a high level of information asymmetry, prompting managers to provide extra disclosure concerning its effect in the form of non-GAAP profits. To test this hypothesis, the reporting behaviour concerning non-GAAP profits in the years 2004 and 2005, 2005 and 2006 and 2004 and 2006 was compared. The year 2005 was a transition year for companies whose year-end is 30 June with 2006 being the first year when the new standards had to be fully implemented. The results for these

comparisons, presented as crosstabs tables, are shown in Table 6.8. Between 2004 and 2005, thirteen companies started reporting a non-GAAP figure and ten companies stopped reporting a non-GAAP figure. The differences between the other pairs of years are similar, with several companies changing their behaviour in each direction. None of the results are statistically significant in one direction. Therefore, the reporting of non-GAAP profit figures did not increase with the introduction of IFRS and Hypothesis 5 is not supported.

Table 6.8: Effect of introduction of IFRS on Reporting a Non-GAAP Profit Figure (predicted sign +)

		2005			*p* Value[a]
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2004	No Non-GAAP Reported	46	13	59	
	Non-GAAP Reported	10	40	50	0.339
	Total	56	53	109	
		2006			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2005	No Non-GAAP Reported	41	15	56	
	Non-GAAP Reported	11	42	53	0.279
	Total	52	57	109	
		2006			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2004	No Non-GAAP Reported	41	18	59	
	Non-GAAP Reported	11	39	50	0.133
	Total	52	57	109	

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

6.6.3 Hypothesis 6

Hypothesis 6 concerned the GFC and predicted that the number of companies reporting non-GAAP profit figures would increase during the years affected by the GFC. It was argued that the usefulness of non-GAAP profit figures might increase during times of economic crises when managers may wish to provide extra information concerning the results. The GFC began in mid-2007 with the 2008 calendar year being the most affected. Conditions improved during the 2009 calendar year but companies reporting with a year-end of 30 June 2009 would have the peak of the crisis, September 2008, included in any financial reports. Therefore, to test this hypothesis, the reporting behaviour in the years 2007 and 2008, 2008 and 2009 and 2007 and 2009 were compared. The results are shown in Table 6.9. Between 2007 and 2008, eleven companies began reporting non-GAAP profits and only four stopped reporting them. This change was not statistically significant. The change from 2008 to 2009 is also not statistically

significant; perhaps as both these years were during the crisis itself. The change in behaviour between 2007 and 2009 is statistically significant ($p < 0.01$) with 17 companies reporting a figure in 2009 that had not done so in 2007 and only five companies ceasing to report one. Therefore, the GFC did have a significant effect on the reporting behaviour of companies concerning non-GAAP profits and Hypothesis 6 is supported.

Table 6.9: Effect of the Global Financial Crisis on Reporting a Non-GAAP Profit Figure (predicted sign +)

		2008			*p* Value[a]
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2007	No Non-GAAP Reported	41	11	52	
	Non-GAAP Reported	4	53	57	0.059
	Total	45	64	109	
		2009			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2008	No Non-GAAP Reported	36	9	45	
	Non-GAAP Reported	4	60	64	0.134
	Total	40	69	109	
		2009			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2007	No Non-GAAP Reported	35	17	52	
	Non-GAAP Reported	5	52	57	**0.009****
	Total	40	69	109	

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

6.6.4 Hypothesis 7

Hypothesis 7 predicted that the number of companies reporting non-GAAP profits would increase following the release of the AICD and FINSIA guidelines concerning underlying profits. The guidelines were released in March 2009 and *Principle 1* of the guidelines encouraged the reporting of a non-GAAP profit as a way of overcoming information asymmetry (AICD & FINSIA 2009, p. 15). To test this hypothesis, the difference between the following years was compared, 2008 to 2009, 2009 to 2010, and 2008 to 2010. Table 6.10 provides the results, with the first two comparisons being not significant. Between 2008 and 2010, thirteen companies changed their reporting behaviour and began reporting non-GAAP profits with only six companies ceasing to do so. Although this is not a statistically significant result, there is a trend towards more companies reporting the figure. As the guidelines were released in March 2009 it is feasible that it may have taken some companies until the 2010 reporting period to make

Table 6.10: Effect of introduction of AICD and FINSIA Guidelines on Underlying Profit on Reporting a Non-GAAP Profit Figure (predicted sign +)

		2009			
		No Non-GAAP Reported	Non-GAAP Reported	Total	*p* Value[a]
2008	No Non-GAAP Reported	36	9	45	
	Non-GAAP Reported	4	60	64	0.134
	Total	40	69	109	
		2010			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2009	No Non-GAAP Reported	32	8	40	
	Non-GAAP Reported	6	63	69	0.396
	Total	38	71	109	
		2010			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2008	No Non-GAAP Reported	32	13	45	
	Non-GAAP Reported	6	58	64	0.083
	Total	38	71	109	

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

any changes suggested. However, as none of the results are statistically significant, it appears that the guidelines did not have a large effect on the decision to report or not report a non-GAAP profit figure for companies in the sample. It could also be argued that the GFC had already increased the number of companies reporting non-GAAP profit figures and the guidelines were released just as recovery from this event was underway. This may have influenced the results for this hypothesis. As the results show that the release of the guidelines did not have a significant influence on the reporting of non-GAAP figures, Hypothesis 7 is not supported.

6.6.5 Hypothesis 8

Finally, Hypothesis 8 concerns the release of the ASIC Regulatory Guide 230 and predicts that its release will not influence a company's decision to report non-GAAP profits. The guide attempts to regulate the calculation and presentation of non-GAAP figures and does not seek to prohibit their use, acknowledging that the figures may be useful for users of financial information. The guide was released in December 2011, so this may have been too late for companies that report at 30 June to adapt their 2011 reports. To test the initial release of the guide the following years were compared, 2010 to 2011, 2011 to 2012, and 2010 to 2012.

Studies in the US initially found a decrease in the reporting of non-GAAP figures after the introduction of regulation but those investigating beyond the initial post-regulation period found a sharp rise in the use of non-GAAP figures in the years since regulation (Black et al. 2012; Brown et al. 2012). To investigate this phenomenon in the Australian context, this study also considers ongoing behaviour since the release of the Regulatory Guide. The first year post regulation (2012) was therefore compared to the three years since then (2013 to 2015). Table 6.11 shows the results for the Hypothesis 8 comparisons.

Table 6.11: Effect of introduction of ASIC Regulatory Guide 230 on Reporting a Non-GAAP Profit Figure (no effect predicted)

		2011			*p* Value[a]
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2010	No Non-GAAP Reported	29	9	38	
	Non-GAAP Reported	8	63	71	1.000
	Total	37	72	109	
		2012			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2011	No Non-GAAP Reported	28	9	37	
	Non-GAAP Reported	6	66	72	0.607
	Total	34	75	109	
		2012			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2010	No Non-GAAP Reported	25	13	38	
	Non-GAAP Reported	9	62	71	0.523
	Total	34	75	109	
		2013			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2012	No Non-GAAP Reported	24	10	34	
	Non-GAAP Reported	6	69	75	0.454
	Total	30	79	109	
		2014			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2012	No Non-GAAP Reported	19	15	34	
	Non-GAAP Reported	2	73	75	**0.002****
	Total	21	88	109	
		2015			
		No Non-GAAP Reported	Non-GAAP Reported	Total	
2012	No Non-GAAP Reported	17	17	34	
	Non-GAAP Reported	6	69	75	**0.035***
	Total	23	86	109	

[a] Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

Results from the first three tests corresponding to the time of the release of the Regulatory Guide are all not statistically significant. While some companies did change their reporting behaviour, the changes occurred in both directions and did not show a significant change in

one direction. Therefore, the release of the guide did not significantly influence the choice to report the figure in one particular direction and Hypothesis 8, which predicted behaviour would not be affected, is supported. However, the additional investigation beyond 2012 shows interesting and statistically significant results. The difference between 2012 and 2014 ($p < 0.01$) and between 2012 and 2015 ($p < 0.05$) are both statistically significant in the direction of an increase in reporting behaviour. Therefore, although the release of the Regulatory Guide had no significant effect on behaviour initially, it has not discouraged companies from making the decision to report a non-GAAP figure in the years since its release.

6.7 Summary

This chapter provided introductory statistics and descriptive information on the frequency, location and amount of non-GAAP profit figures reported by Australian companies as well as the industry sector of companies in the sample. Descriptive statistics and results for Research Questions 1 and 2 were also reported and discussed, detailing which hypotheses were supported and which were not supported by the results. Table 6.12 provides a summary of the research questions and hypotheses analysed in this chapter, along with details of the years in which the hypotheses were supported or not supported. In the next chapter, the results and descriptive statistics for Research Questions 3 and 4 concerning the use of impression management when reporting non-GAAP profit figures are reported and discussed.

Table 6.12: Summary of Results

Research Question	Hypothesis	Supported	Not Supported
Research Question 1: *Is the company's choice to report non-GAAP profit figures influenced by specific firm characteristics?*	**H1:** Larger companies are more likely to report non-GAAP profit figures than smaller companies.	Total Sample 2004 2005 2006 2007 2008 2009 2010 2011 2012	2013 2014 2015
	H2: Companies with dispersed ownership are more likely to report non-GAAP profit figures than companies with concentrated ownership.	2006 2009 2013 2014	Total Sample 2004 2005 2007 2008 2010 2011 2012 2015
	H3: Highly leveraged companies are more likely to report non-GAAP profit figures than lower leveraged companies.	Total Sample 2006 2008 2009 2011 2012 2013 2014 2015	2004 2005 2007 2010
	H4: Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, or more likely to report non-GAAP profit figures than companies reporting an increase in GAAP profits.	Total Sample 2009 2011 2012 2013	2004 2005 2006 2007 2008 2010 2014 2015
Research Question 2: *Is the company's choice to report non-GAAP profit figures influenced by specific events?*	**H5:** The number of companies reporting non-GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.		2004-2005 2005-2006 2004-2006
	H6: The number of companies reporting non-GAAP profit figures will increase during the Global Financial Crisis.	2007-2009	2007-2008 2008-2009
	H7: The number of companies reporting non-GAAP profit figures will increase after the release of guidelines on reporting underlying profits by AICD and FINSIA.		2008-2009 2009-2010 2008-2010
	H8: The number of companies reporting non-GAAP profit figures will not be influenced by the release of Regulatory Guide 230 by ASIC.	2010-2011 2011-2012 2010-2012	

Chapter 7

Results – The Use of Impression Management in the Reporting of Non-GAAP Profits

7.1 Introduction

This chapter reports on the descriptive statistics and results for Research Questions 3 and 4 concerning the use of impression management when reporting non-GAAP profit figures. Section 7.2 reports descriptive statistics for the variables used. The research questions concern the influence company characteristics and specific events may have on the use of impression management when reporting non-GAAP profits and the results for these questions and related hypotheses are presented in Sections 7.3 and 7.4 respectively. Section 7.5 provides some additional analysis concerning the reconciliation of GAAP and non-GAAP profit figures. The chapter concludes with a summary in Section 7.6.

7.2 Descriptive Statistics

7.2.1 Independent Variables

Research Question 3 concerns company characteristics that may influence the use of impression management when reporting non-GAAP profits. The measures for these characteristics form the independent variables. Descriptive statistics for company characteristics for the total sample of 109 companies are provided in Table 6.4. However, for Research Question 3 and its accompanying hypotheses, only those companies which reported a non-GAAP profit figure in any year of the study were required for the analysis. The number of companies reporting a non-GAAP profit varied across the years from 50 companies in 2004 to 86 companies in 2015. Table 7.1 shows the descriptive statistics for those selected companies. A more detailed version of this table showing quartiles is provided in Appendix 12.

Table 7.1: Descriptive statistics for independent variables for Research Question 3

Statistic	2004 n=50	2005 n=53	2006 n=57	2007 n=57	2008 n=64	2009 n=69	2010 n=71	2011 n=72	2012 n=75	2013 n=79	2014 n=88	2015 n=86
Panel A: SIZE (log of market capitalisation)												
Mean	9.2562	9.3591	9.4095	9.5179	9.3302	9.3531	9.4210	9.4228	9.3650	9.3790	9.4505	9.4295
Standard Deviation	0.7118	0.7207	0.5941	0.5495	0.6001	0.6640	0.5847	0.5484	0.6291	0.6228	0.5775	0.6060
Panel B: OWN (ownership concentration = percentage shares owned by top twenty shareholder)												
Mean	62.38	62.73	60.08	62.87	62.55	64.64	68.04	70.21	69.56	69.87	71.87	72.82
Standard Deviation	19.17	18.70	17.05	17.93	17.31	15.64	14.75	14.34	14.18	13.83	14.11	14.36
Panel C: LEV (leverage = total liabilities to total assets)												
Mean	0.5551	0.5563	0.6280	0.6097	0.5994	0.5453	0.5251	0.5273	0.5405	0.5389	0.5173	0.5242
Standard Deviation	0.2101	0.2100	0.2079	0.2057	0.1990	0.2222	0.2253	0.2199	0.2051	0.1992	0.1927	0.2014
Panel D: BAD (bad news firm = decrease in GAAP profit or GAAP loss, good news firm = same or increase in profit)												
Bad News Companies n (%)	6 (12)	17 (32)	17 (30)	13 (23)	35 (55)	45 (65)	13 (18)	36 (50)	43 (57)	35 (44)	31 (35)	38 (44)
Good News Companies n (%)	44 (88)	36 (68)	40 (70)	44 (77)	29 (45)	24 (35)	58 (82)	36 (50)	32 (43)	44 (56)	57 (65)	48 (56)
Total n (%)	50 (100)	53 (100)	57 (100)	57 (100)	64 (100)	69 (100)	71 (100)	72 (100)	75 (100)	79 (100)	88 (100)	86 (100)

Panel A reports the statistics for company size measured by the log of market capitalisation. Over the first four years of the study (2004 to 2007), the mean of this variable increased from $\overline{x}_{2004}$ = 9.2562 to $\overline{x}_{2007}$ = 9.5179. However, the mean decreased in 2008 ($\overline{x}_{2008}$ = 9.3302) at the height of the GFC and then again in 2012 ($\overline{x}_{2012}$ = 9.3650) which aligns with when the ASIC Regulatory Guide came into effect (released in December 2011). As noted in Section 6.4.1, companies that report a non-GAAP profit are, on average, larger than those that do not. The results from logistic regression for Hypothesis 1 (Section 6.5.2) also found that larger companies are significantly more likely to report a non-GAAP figure than smaller companies for all but three years of the study. Therefore, the companies included in this independent variable for Research Question 3 represent some of the larger companies from the total sample.

Panel B shows the results for ownership concentration as measured by the percentage of shares owned by the top twenty shareholders. The mean of this measure remained reasonably constant at around 60% over the first five years of the study (2004 to 2008) and then began to increase in 2009, with the recovery from the GFC, and reached the highest result for the years of the study in 2015 ($\overline{x}_{2015}$ = 72.82%).

Panel C provides the mean leverage for each year measured by total liabilities to total assets. The mean leverage of the companies reporting non-GAAP profits did not vary greatly from year to year, with results showing a peak in 2006 ($\overline{x}_{2006}$ = 0.6280) and then a gradual decline to a low in 2014 ($\overline{x}_{2014}$ = 0.5173), with 2015 rising again slightly ($\overline{x}_{2015}$ = 0.5242). The descriptive statistics for Research Questions 1 (Section 6.4) indicate that companies reporting a non-GAAP figure were more highly leveraged, on average, in every year of the study. The results for Hypothesis 3 using logistic regression (Section 6.5.4) indicate that more highly leveraged firms were significantly more likely to report a non-GAAP figure in seven of the twelve years of the study. Therefore, the companies included in this independent variable for Research Question 3 are already some of the more highly leveraged firms from the total sample.

The number of companies classified as ‘bad news firms’ or ‘good news firms’ are shown in Panel D (with the percentages out of total non-GAAP reporters for each year shown in brackets). The year with the lowest number of bad news companies reporting a non-GAAP profit was 2004 with six out of 50 firms (12%). The highest number of bad news firms for this variable was in 2009 with 45 out of 69 (65%) of the non-GAAP reporters that year being classified as bad news firms.

Although Research Question 3 has multiple independent variables, Research Question 4 has only one. This question concerns the influence certain events may have had on the use of impression management tactics relating to emphasis and prominence. The independent variable is a categorical variable representing the particular years in question surrounding the relevant events, therefore no descriptive statistics are warranted.

7.2.2 Dependent Variables

The analysis for both Research Questions 3 and 4 was conducted using three different dependent variables, the relative emphasis scores for the press release, the relative emphasis scores for the annual report and the total relative emphasis scores for both documents together. These scores were calculated using the impression management index schema developed in Chapter 5 (Section 5.6.2). The non-GAAP and GAAP profit figures in both documents were coded for location/prominence and repetition. To arrive at the relative emphasis score, the total IM score for the GAAP figures was subtracted from the total IM score for the non-GAAP figures. A positive relative emphasis score means that the non-GAAP figure was given emphasis over the GAAP figure. A negative score means the GAAP figure was emphasised over the non-GAAP figure and a score of zero means both figures were emphasised equally (using the coding scheme for this study).

Table 7.2 provides descriptive statistics for these dependent variables with a more comprehensive table provided in Appendix 13. Panel A shows the results for the annual results press release. The

Table 7.2: Descriptive statistics for dependent variables for Research Questions 3 and 4

Statistic	2004 n=50	2005 n=53	2006 n=57	2007 n=57	2008 n=64	2009 n=69	2010 n=71	2011 n=72	2012 n=75	2013 n=79	2014 n=88	2015 n=86
IM (Impression Management relative emphasis measure = emphasis score for non-GAAP – emphasis score for GAAP)												
Panel A: ***Press Release Relative Emphasis***												
Mean	1.000	0.368	0.974	0.386	1.531	1.109	0.697	0.028	-0.300	-0.335	-0.489	0.134
Standard Deviation	3.6309	4.3036	3.7302	4.8200	3.9670	4.1665	4.2084	2.8133	2.5121	2.9218	3.2154	3.3698
Panel B: ***Annual Report Relative Emphasis***												
Mean	0.420	-0.358	1.009	0.895	1.508	0.507	0.669	0.299	0.200	0.032	0.080	0.221
Standard Deviation	4.9357	4.7184	4.4806	4.4035	4.2337	4.1749	4.3136	3.6189	3.5641	3.1758	4.0626	3.7050
Panel C: ***Total Relative Emphasis***												
Mean	1.420	0.009	1.982	1.281	3.039	1.616	1.366	0.326	-0.100	-0.304	-0.409	0.355
Standard Deviation	7.3202	8.2826	7.2407	8.1837	7.1048	7.5800	7.7418	5.3970	5.1386	5.2984	6.5524	5.8566

highest positive mean score, representing when non-GAAP figures were most emphasised over GAAP figures, is in 2008 ($\overline{x}_{2008}$ = 1.531), with the second highest in 2009 ($\overline{x}_{2009}$ = 1.109), the two years most affected by the GFC. This finding indicates companies gave a much higher emphasis to non-GAAP figures in these years. The lowest mean relative emphasis scores for press releases were in 2012 to 2014 ($\overline{x}_{2012}$ = -0.300, $\overline{x}_{2013}$ = -0.335, and $\overline{x}_{2014}$ = -0.489), with the mean scores in each of these years being negative. This indicates that in those years, on average, the GAAP figure was emphasised over the non-GAAP figure. These years were the first three years after the introduction of the ASIC Regulatory Guide, which required equal or greater prominence be given to the GAAP figure. It is interesting to note that in 2015, four years after the introduction of the Regulatory Guide, the mean becomes positive again ($\overline{x}_{2015}$ = 0.134), indicating that on average the non-GAAP figure was once again given more emphasis.

The mean relative emphasis for the annual reports is shown in Panel B. Like the press release results, the highest positive mean score was in 2008 ($\overline{x}_{2008}$ = 1.508), one of the years of the GFC. In this year the non-GAAP figure, on average, was the most highly emphasised compared to the GAAP figure of all the years in the study. However, unlike the press release, the second highest positive mean was in 2006 ($\overline{x}_{2006}$ = 1.009), the first year Australian companies had to fully implement IFRS. The lowest mean was a negative score in 2005 ($\overline{x}_{2005}$ = -0.358), making this the only year in the study when the GAAP profit was given more emphasis than the non-GAAP profit. In the years 2012 to 2014 ($\overline{x}_{2012}$ = 0.200, $\overline{x}_{2013}$ = 0.032, and $\overline{x}_{2014}$ = 0.080) the means were close to zero but still positive, indicating the non-GAAP figure was still the more emphasised figure in the annual reports. The non-GAAP figure was therefore given more prominence in every year of the study in the annual report except in 2005.

The differences between the descriptive statistics for press releases and those for annual reports highlight the way companies differentiate between using these two documents to disclose results. Panel C provides the overall relative emphasis score, calculated by adding the scores for both the press release and annual reports. This score gives an indication of the total emphasis strategy of the companies across the two documents. As with the press release and annual report, the highest

mean was in 2008 ($\overline{x}_{2008}$ = 3.039), one of the years of the GFC, showing a high emphasis of the non-GAAP figure as compared to the GAAP figure. The only negative means, indicating an emphasis of the GAAP figure as compared to the non-GAAP figure, were in 2012 to 2014 ($\overline{x}_{2012}$ = -0.100, $\overline{x}_{2013}$ = -0.304, and $\overline{x}_{2014}$ = -0.409) after the release of the ASIC Regulatory Guide. As with the press release, the mean total relative emphasis score reverted to a positive number in 2015 ($\overline{x}_{2015}$ = 0.355), indicating that the non-GAAP figure was once again the more emphasised figure. The year 2005 ($\overline{x}_{2005}$ = 0.009), the transition year for IFRS, was an unusual year with the mean emphasis being almost equal.

The relative emphasis scores presented in Table 7.2 were calculated by subtracting the IM score for GAAP figures from the IM score for non-GAAP figures. The IM score for each type of figure was calculated by adding the results of the coding for location/prominence and repetition (as explained in Section 5.6.2), with the score providing an indication of the total level of emphasis different companies give to each of the figures. In order to provide more insight into these IM scores, Table 7.3 examines the scores in more depth by showing the mean location/prominence scores and the mean repetition scores for both the non-GAAP and GAAP profit figures in the two documents analysed. The difference between the figures is also reported, with a positive result indicating that the non-GAAP figure was emphasised more than the GAAP figure and a negative result indicating that the GAAP figure was emphasised more than the non-GAAP figure for the particular impression management tactic being reported.

In the press release, the mean non-GAAP profit location/prominence score exceeded the mean GAAP profit location/prominence score in every year until 2011 when the ASIC Regulatory Guide was released. The mean GAAP profit location/prominence score was then higher until 2015 when the non-GAAP profit score was once again higher. The mean repetition scores also show the non-GAAP profit score being higher in all years except 2012 and 2014, meaning this number tends to be repeated more in press releases than the GAAP profit figure. The difference between the two repetition scores was the highest in 2008 showing that, in the press release, companies repeated the non-GAAP figure much more than the GAAP figure in that year. In the

Table 7.3: Breakdown of mean "location/prominence" and "repetition" scores for non-GAAP and GAAP figures
(higher figure each year is shown in bold)

	Press Release						Annual Report					
Year	**Mean Loc/Prom Score Non-GAAP**	**Mean Loc/Prom Score GAAP**	**Difference**	**Mean Repetition Score Non-GAAP**	**Mean Repetition Score GAAP**	**Difference**	**Mean Loc/Prom Score Non-GAAP**	**Mean Loc/Prom Score GAAP**	**Difference**	**Mean Repetition Score Non-GAAP**	**Mean Repetition Score GAAP**	**Difference**
2004 (n=50)	**3.0000**	2.0900	0.9100	**0.3600**	0.2700	0.0900	**4.3500**	3.8100	0.5400	1.2800	**1.4000**	-0.1200
2005 (n=53)	**3.1698**	2.8585	0.3113	**0.4906**	0.4340	0.0566	**3.9623**	3.9151	0.0472	1.1887	**1.5943**	-0.4056
2006 (n=57)	**3.7368**	2.9298	0.8070	**0.5789**	0.4123	0.1666	**4.9649**	3.9561	1.0088	1.5614	1.5614	0
2007 (n=57)	**4.0088**	3.7544	0.2544	**0.6404**	0.5088	0.1316	**4.8684**	4.0351	0.8333	**1.6316**	1.5702	0.0614
2008 (n=64)	**4.0391**	2.7344	1.3047	**0.6016**	0.3750	0.2266	**5.0391**	3.8125	1.2266	**1.7656**	1.4844	0.2812
2009 (n=69)	**4.1522**	3.1304	1.0218	**0.5797**	0.4928	0.0869	**4.6739**	4.1594	0.5145	1.6812	**1.6884**	-0.0072
2010 (n=71)	**4.1408**	3.5775	0.5633	**0.6338**	0.5000	0.1338	**4.5986**	4.0282	0.5704	**1.6831**	1.5845	0.0986
2011 (n=72)	3.9792	**3.9931**	-0.0139	**0.6458**	0.6042	0.0416	**4.5556**	4.3958	0.1598	**1.9931**	1.8542	0.1389
2012 (n=75)	3.8867	**4.1533**	-0.2666	0.6533	**0.6867**	-0.0334	**4.7667**	4.4400	0.3267	1.9333	**2.0600**	-0.1267
2013 (n=79)	4.0127	**4.3671**	-0.3544	**0.6076**	0.5886	0.0190	4.7405	**4.7785**	-0.0380	**2.2278**	2.1582	0.0696
2014 (n=88)	3.2898	**3.7330**	-0.4432	0.5000	**0.5455**	-0.0455	**4.5909**	4.3807	0.2102	2.1705	**2.3011**	-0.1306
2015 (n=86)	**3.6570**	3.5814	0.0756	**0.5698**	0.5116	0.0582	**4.3488**	4.1512	0.1976	**2.2791**	2.2558	0.0233

annual report, the mean location/prominence score for the non-GAAP figure was higher than the score for the GAAP figure in every year of the study except 2013. However, the repetition scores show that the GAAP figure was often repeated more than the non-GAAP figure in the annual report, with this being the case in 2004, 2005, 2009, 2012 and 2014. The repetition scores were often quite similar between the two figures in the annual report as both figures tended to be discussed together in sections such as the Chairman's and CEO's letter, and the Directors' Report or Review of Operations. These descriptive statistics have provided an overview of the variables used in Research Questions 3 and 4 and these two research questions will now be analysed.

7.3 Research Question 3 – Influence of Company Characteristics on the use of Impression Management

7.3.1 General Overview

Research Question 3 concerns whether the use of impression management tactics relating to emphasis when reporting non-GAAP profits compared to GAAP profits is influenced by specific firm characteristics. As the dependent variable is a ratio number, multiple regression analysis was conducted to evaluate Model 2:

Model 2:

$$RE_{1\text{-}3} = \beta_0 + \beta_1 SIZE + \beta_2 OWN + \beta_3 LEV + \beta_4 BAD + \epsilon$$

Where:

RE_1 = Press release relative emphasis = emphasis score for non-GAAP profit figure in press releases – emphasis score for GAAP profit figure in press releases

RE_2 = Annual report relative emphasis = emphasis score for non-GAAP profit figure in annual reports – emphasis score for GAAP profit figure in annual reports

RE_3 = Total relative emphasis = total emphasis score for non-GAAP profit figure – total emphasis score for GAAP profit figure

SIZE = Size of the organisation, as measured by log of market capitalisation

OWN = Ownership concentration, as measured by percentage shares owned by top twenty shareholders

LEV = Leverage, as measured by total liabilities to total assets

BAD = Bad news firm: 1 if decrease in IFRS profit from previous period or IFRS loss, 0 if same or increase in profit

The multiple regression analysis was undertaken for the total sample as a whole and then for each year of the study individually. All companies that reported a non-GAAP profit in a particular year were included in the analysis for that year. As with Research Question 1, the model was assessed for outliers using standardised residuals, leverage values and Cook's

distance. Outliers were removed from the final analysis, with information on the company name, industry sector, year and results for the three tests used to determine outliers contained in Appendix 14 (total sample) and Appendix 15 (individual years). Pearson's Correlation Matrices of the three independent continuous variables for non-GAAP reporters are presented in Appendix 16. Leverage is significantly positively related to size in the total sample and all the years except 2009 ($p < 0.05$ for 2008 and 2010; $p < 0.01$ for the total sample and all other years). Leverage is significantly negatively related to ownership concentration in the total sample and in all the years except 2006 ($p < 0.05$ for 2004; $p < 0.01$ for the total sample and all other years). Size and ownership concentration are significantly negatively related in 2005 and 2014 ($p < 0.05$ for both years). The variance inflation factor (VIF) was also measured for each variable to assess multicollinearity and the results are reported along with the other results in Tables 7.5 and 7.6. High VIF values denote high collinearity with the common threshold being a VIF value above 10 (Hair et al. 2013). The results of this study indicate that high collinearity does not appear to be an issue.

The multiple regression analysis was undertaken for the press release, annual report and total relative emphasis for the total sample as a whole, and for each year individually, resulting in 39 different versions of the model being run for analysis. Of the three models concerning the multiple regression analysis for the total sample of companies that reported a non-GAAP profit figure, the models for the press release relative emphasis ($R^2 = 0.018$, $F(4,759) = 4.470$, $p < 0.01$) and for the total relative emphasis ($R^2 = 0.013$, $F(4,761) = 3.535$, $p < 0.01$) were statistically significant. The results of the analysis are presented in Table 7.4.

Table 7.4: Multiple regression analysis of use of impression management tactics as a function of company characteristic – Total sample

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Press Release – Model Reliability: $R^2 = 0.018$, $F(4,759) = 4.470$, $p = 0.001$					
Size	+	0.192	-0.084	**-2.109***	1.228
Ownership Concentration	-	0.007	-0.032	-0.826	1.151
Leverage	+	0.006	0.109	**2.585****	1.372
Good/Bad News Year	+	0.219	0.091	**2.505****	1.016
Constant		1.792		1.931	
Total – Model Reliability: $R^2 = 0.013$, $F(4,761) = 3.535$, $p = 0.007$					
Size	+	.366	-.015	-.389	1.222
Ownership Concentration	-	.014	-.070	**-1.809***	1.157
Leverage	+	.011	.058	1.375	1.374
Good/Bad News Year	+	.415	.094	**2.591****	1.016
Constant		3.406		0.751	

[a] Reported *t* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

The results for the multiple regression analysis conducted on each individual year for the press release, annual report and total relative emphasis are shown for the ten statistically significant models in Table 7.5. As only ten of the 36 models were statistically significant and due to the number of models involved, a table showing full results with the tests of significance for all models in contained in Appendix 17.

Table 7.5: Multiple regression analysis of use of impression management tactics as a function of company characteristics for significant models

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Panel A: 2004					
Annual Report – Model Reliability: $R^2 = 0.233$, $F(4,43) = 4.568$, $p = 0.004$					
Size	+	0.928	0.222	1.516	1.317
Ownership Concentration	-	0.032	-0.023	-0.170	1.122
Leverage	+	0.032	-0.615	**-4.123****	1.366
Good/Bad News Year	+	1.778	0.053	0.410	1.031
Constant		8.477		-0.580	
Total – Model Reliability: $R^2 = 0.165$, $F(4,44) = 3.371$, $p = 0.017$					
Size	+	1.505	0.200	1.338	1.290
Ownership Concentration	-	0.052	0.019	0.138	1.120
Leverage	+	0.052	-0.522	**-3.403****	1.352
Good/Bad News Year	+	2.889	0.097	0.723	1.037
Constant		13.659		-0.619	
Panel B: 2007					
Press Release – Model Reliability: $R^2 = 0.177$, $F(4,49) = 3.841$, $p = 0.009$					
Size	+	1.121	0.399	**2.901****	1.217
Ownership Concentration	-	0.033	-0.367	**-2.629****	1.254
Leverage	+	0.032	-0.133	-0.895	1.427
Good/Bad News Year	+	1.261	0.081	0.636	1.034
Constant		9.983		-2.335	
Panel C: 2009					
Press Release – Model Reliability: $R^2 = 0.176$, $F(4,61) = 4.472$, $p = 0.003$					
Size	+	0.638	-0.230	**-1.997***	1.047
Ownership Concentration	-	0.030	0.192	1.560	1.193
Leverage	+	0.021	0.485	**3.913****	1.212
Good/Bad News Year	+	0.891	-0.142	-1.248	1.024
Constant		6.145		1.072	
Annual Report – Model Reliability: $R^2 = 0.150$, $F(4,60) = 3.821$, $p = 0.008$					
Size	+	0.631	-0.282	**-2.377****	1.057
Ownership Concentration	-	0.029	0.048	0.385	1.164
Leverage	+	0.021	0.419	**3.314****	1.206
Good/Bad News Year	+	0.872	-0.127	-1.092	1.019
Constant		6.074		1.812	
Total – Model Reliability: $R^2 = 0.217$, $F(4,59) = 5.378$, $p = 0.001$					
Size	+	1.082	-0.305	**-2.664****	1.055
Ownership Concentration	-	0.050	0.170	1.394	1.200
Leverage	+	0.036	0.506	**4.094****	1.228
Good/Bad News Year	+	1.527	-0.181	-1.597	1.030
Constant		10.409		1.782	

Table 7.5: Multiple regression analysis of use of impression management tactics as a function of company characteristics for significant models (continued)

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Panel D: 2010					
Press Release – Model Reliability: $R^2 = 0.217$, $F(4,62) = 5.584$, $p = 0.001$					
Size	+	0.720	0.079	0.682	1.130
Ownership Concentration	-	0.029	0.496	**4.233****	1.156
Leverage	+	0.020	0.361	**3.025****	1.201
Good/Bad News Year	+	1.036	0.138	1.240	1.041
Constant		7.247		-2.180	
Total – Model Reliability: $R^2 = 0.140$, $F(4,62) = 3.697$, $p = 0.009$					
Size	+	1.368	0.069	0.570	1.131
Ownership Concentration	-	0.055	0.376	**3.073****	1.150
Leverage	+	0.038	0.361	**2.886****	1.201
Good/Bad News Year	+	2.026	0.002	0.018	1.038
Constant		13.723		-1.694	
Panel E: 2012					
Total – Model Reliability: $R^2 = 0.132$, $F(4,66) = 3.650$, $p = 0.010$					
Size	+	0.962	0.093	0.718	1.364
Ownership Concentration	-	0.041	-0.181	-1.475	1.214
Leverage	+	0.030	-0.081	-0.611	1.420
Good/Bad News Year	+	1.145	0.378	**3.169****	1.148
Constant		9.458		-0.366	
Panel F: 2015					
Annual Report – Model Reliability: $R^2 = 0.072$, $F(4,77) = 2.579$, $p = 0.044$					
Size	+	0.647	0.181	1.341	1.591
Ownership Concentration	-	0.023	0.246	**2.141***	1.151
Leverage	+	0.019	0.105	0.792	1.532
Good/Bad News Year	+	0.675	-0.109	-0.932	1.202
Constant		6.125		-1.875	

[a] Reported *t* values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

7.3.2 Hypothesis 9

Hypothesis 9 concerned size of companies and predicted that larger companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than smaller companies. For the total sample, Table 7.4, size was statistically significant ($t = -2.109$, $p < 0.05$) in the press release but not in the predicted direction. This indicates that over the total sample for the twelve years, smaller companies were more likely to use impression management tactics to emphasise non-GAAP over GAAP profits in the press release than larger companies. Results from analysing each year individually showed that size was statistically significant and in the predicted direction for the press release in 2007, see Table 7.5 Panel B, ($t = 2.901$, $p < 0.01$). In 2009, see Table 7.5 Panel C, it was statistically significant for the press release ($t = -1.997$, $p < 0.05$), annual report ($t = -2.377$, $p < 0.01$), and the total relative emphasis ($t = -2.664$, $p < 0.01$) but, as in the total sample, not in

the predicted direction, meaning that smaller companies were more likely to use impression management to highlight non-GAAP profits. Therefore, Hypothesis 9 is not supported except in the press release in 2007.

7.3.4 Hypothesis 10

Hypothesis 10 concerned the influence ownership concentration would have on the use of impression management tactics when reporting non-GAAP compared to GAAP profits. It was predicted that companies with more dispersed ownership are more likely to use impression management. For the sample overall, see Table 7.4, ownership concentration was statistically significant and in the predicted direction for the total relative emphasis score (t = -1.809, p < 0.01). This indicates that analysing the total sample over the twelve years, companies with more dispersed ownership were more likely to use impression management tactics to emphasise non-GAAP profit figures over GAAP profit figures across the press release and annual report as a whole. The results for each year individually show that this variable was statistically significant and in the predicted direction in the press release for 2007, see Table 7.5 Panel B, (t = -2.629, p < 0.01). It was also statistically significant but not in the predicted direction for the press release (t = 4.233, p < 0.01) and the total (t = 3.073, p < 0.01) in 2010, see Table 7.5 Panel D, and the annual report in 2015, see Table 7.5 Panel F, (t = 2.141, p < 0.05). These results indicate that Hypothesis 10 is supported for total sample for the total relative emphasis and in the press release in 2007.

7.3.5 Hypothesis 11

Hypothesis 11 predicted that highly leveraged companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profits than companies with lower levels of leverage. For the total sample over the twelve years, see Table 7.4, leverage was statistically significant and in the predicted direction in the press release (t = 2.585, p < 0.01). For individual years, leverage was statistically significant and in the predicted direction for the press release (t = 3.913, p < 0.01), annual report (t = 3.314, p < 0.01) and total (t = 4.094, p < 0.01) in 2009, see Table 7.5 Panel C, and the press release (t = 3.025, p < 0.01) and total (t = 2.886, p < 0.01) in 2010, see Table 7.5 Panel D. It was statistically significant but not in the predicted direction for the annual report (t = -4.123, p <

0.01) and total (t = -3.403, p < 0.01) in 2004, see Table 7.5 Panel A. Hypothesis 11 is therefore supported for the total sample for the press release. It was also supported for the press release in 2009 and 2010, the annual report in 2009 and the total relative emphasis in 2009 and 2010. These years represent the second year of the GFC and the year immediately following.

7.3.6 Hypothesis 12

Good or bad news companies were the topic of Hypothesis 12, which predicted that bad news companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profits. For the total sample, see Table 7.4, this variable was statistically significant and in the predicted direction in both the press release (t = 2.505, p < 0.01) and total (t = 2.591, p < 0.01) relative emphasis scores. This indicates that for the total sample, companies reporting bad news in the form of a decrease in profits from the previous period, or a loss, were more likely to emphasis the non-GAAP profit figure than the GAAP profit figure. For individual years, this variable was statistically significant and in the predicted direction in the total relative emphasis for 2012 only, see Table 7.5 Panel E, (t = 3.169, p < 0.01). Hypothesis 12 is therefore supported for the total sample but in only one case when the years are analysed individually.

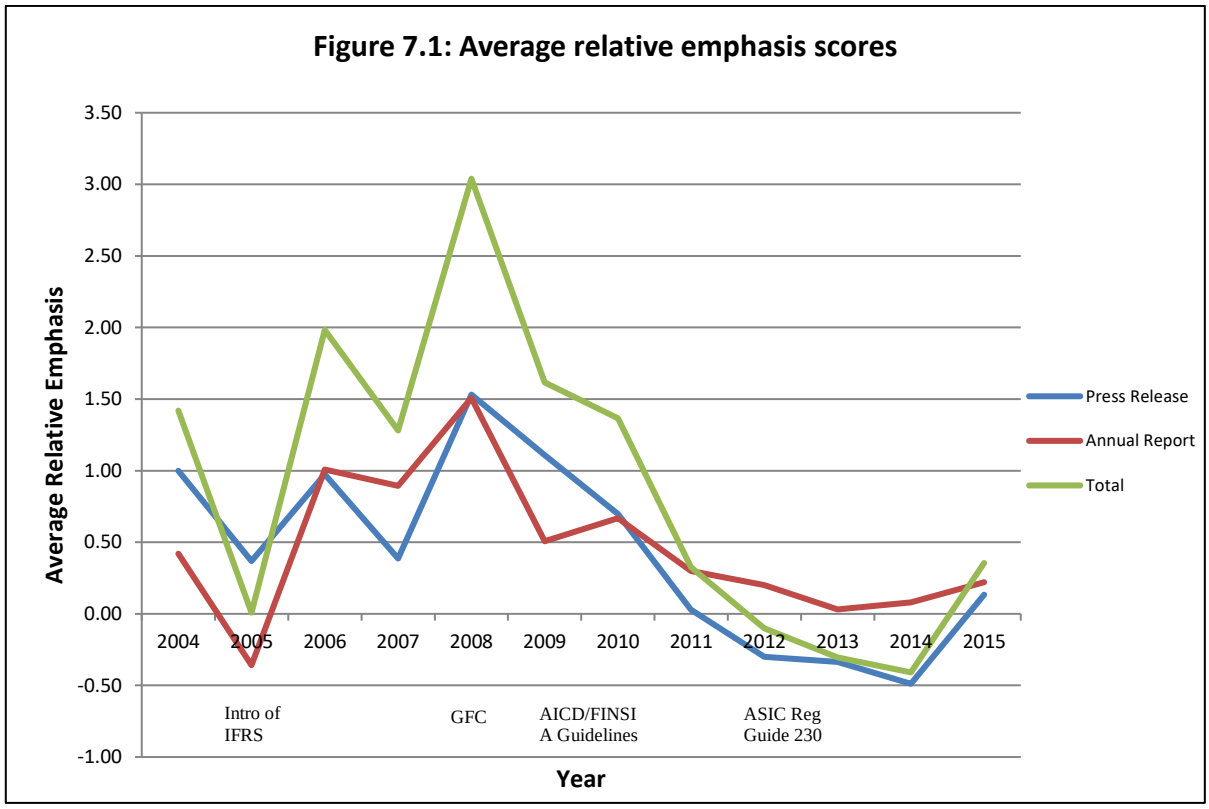
7.4 Research Question 4 – Influence of Specific Events on the use of Impression Management

7.4.1 General Overview

Research Question 4 concerns whether the use of impression management tactics when reporting non-GAAP as compared to GAAP profits is influenced by specific events. The dependent variables in this case, as in Research Question 3, are the relative emphasis scores for the press release, annual report and total for each year. Figure 7.1 shows the trend in the mean relative emphasis scores for the press release, annual report and the total of the two documents over the twelve-year period of the study and labels the specific events under investigation (see Table 7.2 and Appendix 13 for data). As explained previously, the scores for each company are calculated by taking the total IM score for GAAP figures from the total IM score for non-GAAP figures. A positive result means that the non-GAAP figure was

emphasised over the GAAP figure while a negative score means the GAAP figure was emphasised. Mean scores around zero indicate equal emphasis according to the coding scheme used in the study.

Changes surrounding the events under investigation in Research Question 4 can be identified in the graph. There was a sharp trend towards emphasising GAAP figures over non-GAAP figures in 2005, the transition year of IFRS. This trend also occurred from 2011 onward after



the release of the ASIC Regulatory Guide (noting however the trend back to emphasising non-GAAP figures in 2015). In contrast, there was a sharp increase towards emphasising non-GAAP figures over GAAP figures in 2006, the first year IFRS had to be fully implemented and then in 2008, one of the years of the GFC (the peak of the GFC was in September 2008).

To further investigate Research Question 4 and determine if the trends identified in Figure 7.1 are statistically significant, a series of independent t-tests were conducted. These tests were

used to establish if the mean of the relative emphasis scores for companies reporting a non-GAAP figure in one year differs from the mean of the score for companies reporting a non-GAAP figure in a different year. Outliers were removed from the analysis using z scores as explained in Section 5.8.5. A list of the outliers that were removed is contained in Appendix 18. The results as they relate to each hypothesis are discussed below and presented in tables in each section of the discussion.

7.4.2 Hypothesis 13

Hypothesis 13 concerned the introduction of IFRS and predicted that the use of impression management tactics concerning non-GAAP profit figures as compared to GAAP profit figures would increase during this time. The year 2005 was a transition year for companies whose year-end is 30 June, and although the annual report was still prepared under the previous regime companies were to provide certain disclosures concerning the effect of IFRS adoption. The year 2006 was the first year when the new standards had to be fully implemented. Therefore, it was predicted that the introduction of IFRS would have some influence on reporting in 2005 and 2006. To test this hypothesis, the relative emphasis scores for the years 2004 and 2005, 2005 and 2006 and 2004 and 2006 were compared. The results are shown in Table 7.6.

Table 7.6: Effect of introduction of IFRS on relative emphasis between non-GAAP and GAAP (predicted sign +)

	Relative Emphasis Scores		
	Press Release	**Annual Report**	**Total**
2005 Mean	0.3679	-0.3585	0.0094
2004 Mean	1.0000	0.4200	1.4200
Difference	-0.63208	-0.77849	-1.41057
	t (101) = -0.803, p = 0.212	t (101) = -0.818, p = 0.208	t (101) = -0.914, p = 0.182
2006 Mean	0.9737	1.0088	1.9825
2005 Mean	0.3679	-0.3585	0.0094
Difference	0.60576	1.36726	1.97302
	t (108) = 0.790, p = 0.216	t (108) = 1.559, p = 0.061	t (108) = 1.332, p = 0.093
2006 Mean	0.9737	1.0088	1.9825
2004 Mean	1.0000	0.4200	1.4200
Difference	-0.02632	0.58877	0.56246
	t (105) = -0.037, p = 0.486	t (105) = 0.647, p = 0.256	t (105) = 0.399, p = 0.346

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

Between 2004 and 2005, the mean relative emphasis score decreased in each document and overall. In the annual report the score became negative, indicating a relative emphasis favouring the GAAP number. The score representing the total of the two documents was effectively a zero. However, the results of the t-tests were not statistically significant between these two years. Between 2005 and 2006 the results changed in the opposite direction with an increase in the relative emphasis favouring the non-GAAP figures. These results were also not statistically significant. The results between 2004 and 2006 show a slight decrease in relative emphasis in the press release and increases in the annual report and total, although none of the results are statistically significant. Therefore, the relative emphasis of non-GAAP and GAAP figures was not significantly influenced by the introduction of IFRS and Hypothesis 13 is not supported.

7.4.3 Hypothesis 14

Hypothesis 14 predicted that the use of impression management tactics for reporting non-GAAP profit figures compared to GAAP profit figures would increase during the GFC. It was argued that companies would wish to emphasise the non-GAAP figure at a time when the GAAP results would most likely have been affected by the economic downturns. To test this hypothesis, the reporting behaviour in the years 2007 and 2008, 2008 and 2009 and 2007 and 2009 were compared. The results are shown in Table 7.7.

Table 7.7: Effect of the Global Financial Crisis on relative emphasis between non-GAAP and GAAP (predicted sign +)

	Relative Emphasis Scores		
	Press Release	**Annual Report**	**Total**
2008 Mean	1.7222	1.5078	3.0391
2007 Mean	0.3860	0.8947	1.2807
Difference	1.33626	0.61308	1.75836
	t (118) = 1.714, p = **0.045***	t (119) = 0.780, p = 0.219	t (119) = 1.265, p = 0.104
2009 Mean	1.1087	0.5072	1.6159
2008 Mean	1.7222	1.5078	3.0391
Difference	-0.61353	-1.00057	-1.42312
	t (130) = -0.892, p = 0.187	t (131) = -1.372, p = 0.087	t (131) = -1.115, p = 0.114
2009 Mean	1.1087	0.5072	1.6159
2007 Mean	0.3860	0.8947	1.2807
Difference	0.72273	-0.38749	0.33524
	t (124) = 0.903, p = 0.184	t (124) = -0.506, p = 0.307	t (124) = 0.238, p = 0.406

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

Between 2007 and 2008, the relative emphasis increased across both documents and the total, with the result for the press release being statistically significant ($p < 0.05$). This indicates the relative emphasis shifted towards emphasising the non-GAAP figure. Between 2008 and 2009 the relative emphasis decreased across both documents and the total, but not to a statistically significant level. Between 2007 and 2009 there was an increase in relative emphasis in the press release and total score but a decrease in the annual report, again not to a statistically significant level. Therefore, the results between 2007 and 2008 were in the predicted direction and were statistically significant for the press release and Hypothesis 14 is partially supported.

7.4.4 Hypothesis 15

The guidelines on the reporting of non-GAAP profit information released in March 2009 by AICD and FINSIA encourage the reporting of non-GAAP profit figures but state that this should be done 'without giving undue prominence to the underlying profit figure' (AICD & FINSIA 2009, p. 15). Therefore, Hypothesis 15 predicted that the use of impression management tactics when reporting non-GAAP profit figures compared to GAAP profit figures would decrease with the release of these guidelines. To test this hypothesis, the difference between the following years was compared, 2008 to 2009, 2009 to 2010, and 2008 to 2010 with Table 7.8 showing the results.

Table 7.8: Effect of introduction of AICD and FINSIA *Guidelines on Underlying Profit* on relative emphasis between non-GAAP and GAAP (predicted sign -)

	Relative Emphasis Scores		
	Press Release	**Annual Report**	**Total**
2009 Mean	1.1087	0.5072	1.6159
2008 Mean	1.7222	1.5078	3.0391
Difference	-0.61353	-0.41463	-1.42312
	t (130) = -0.892, p = 0.187	t (131) = -1.372, p = 0.087	t (131) = -1.115, p = 0.114
2010 Mean	0.6972	0.6690	1.3662
2009 Mean	1.1087	0.5072	1.6159
Difference	-0.41151	0.16177	-0.24974
	t (138) = -0.581, p = 0.281	t (138) = 0.225, p = 0.411	t (138) = -0.193, p = 0.424
2010 Mean	0.6972	0.6690	1.3662
2008 Mean	1.5313	1.5078	3.0391
Difference	-0.83407	-0.83880	-1.67287
	t (133) = -1.181, p = 0.120	t (133) = -1.138, p = 0.129	t (133) = -1.303, p = 0.098

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

The relative emphasis scores for the press release, annual report and the total all decreased between 2008 and 2009, and between 2008 and 2010, although none significantly. The press release and total score also decreased between 2009 and 2010 but the annual report score increased. Again, none of the results were statistically significant. Therefore, although there was generally less relative emphasis on non-GAAP profit figures, Hypothesis 15 is not supported.

7.4.5 Hypothesis 16

The ASIC Regulatory Guide 230 required companies to give IFRS (GAAP) financial information equal or greater prominence than non-IFRS (non-GAAP) information (ASIC 2011). Hypothesis 16 predicted that the introduction of these guidelines would cause a decrease in the use of impression management tactics relating to emphasis when reporting non-GAAP as compared to GAAP profits. As the guide was released in December 2011, its full impact may not have been realised until the 2012 reporting period. To test the initial release of the guide the following years were compared, 2010 to 2011, 2011 to 2012, and 2010 to 2012. In order to also assess the ongoing effect of the guide, the first year post regulation (2012) was compared to the following three years (2013 to 2015). Table 7.9 shows the results for these comparisons.

Between 2010 and 2011, and between 2011 and 2012, the relative emphasis in the press release, annual report and the total all decreased meaning the relative emphasis moved away from emphasising the non-GAAP figure towards the GAAP figure. Although all in the predicted direction, none of the results of the t-tests were statistically significant. However, when comparing the relative emphasis between 2010 and 2012 (the two years straddling the introduction of the Regulatory Guide), the results for the press release show a statistically significant decrease in mean relative emphasis ($p < 0.05$) with the mean scores decreasing from $\overline{x}_{2010} = 0.6972$ to $\overline{x}_{2012} = -0.3000$. Hypothesis 16 is therefore supported with regard to the press release.

Table 7.9: Effect of introduction of ASIC Regulatory Guide 230 on relative emphasis between non-GAAP and GAAP (predicted sign -)

	Relative Emphasis Scores		
	Press Release	Annual Report	Total
2011 Mean 2010 Mean Difference	0.0278 0.6972 -0.66941 t (122) = -1.117, p = 0.133	0.2986 0.6690 -0.37040 t (141) = -0.557, p = 0.290	0.3264 1.3662 -1.03981 t (125) = -0.931, p = 0.177
2012 Mean 2011 Mean Difference	-0.3000 0.0278 -0.32778 t (145) = -0.746, p = 0.229	0.3446 0.2986 0.04598 t (144) = 0.080, p = 0.469	-0.1000 0.3264 -0.42639 t (145) = -0.491, p = 0.312
2012 Mean 2010 Mean Difference	-0.3000 0.6972 -0.99718 t (113) = -1.727, p = **0.044***	0.3446 0.6690 -0.32442 t (143) = -0.506, p = 0.307	-0.1000 1.3662 -1.46620 t (121) = -1.341, p = 0.092
2013 Mean 2012 Mean Difference	-0.2051 -0.3000 0.09487 t (151) = 0.225, p = 0.411	0.0316 0.3446 -0.31295 t (151) = -0.592, p = 0.278	-0.0897 -0.1000 0.01026 t (151) = -0.013, p = 0.495
2014 Mean 2012 Mean Difference	-0.3678 -0.3000 -0.06782 t (160) = -0.154, p = 0.439	0.0795 0.3446 -0.26505 t (160) = -0.447, p = 0.328	-0.4091 -0.1000 -0.30909 t (161) = -0.331, p = 0.371
2015 Mean 2012 Mean Difference	0.0059 -0.3000 0.30588 t (158) = 0.670, p = 0.252	0.5179 0.3446 0.52198 t (156) = 0.332, p = 0.370	0.5824 -0.1000 0.68235 t (158) = 0.808, p = 0.210

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.

* Significant at the 0.05 level

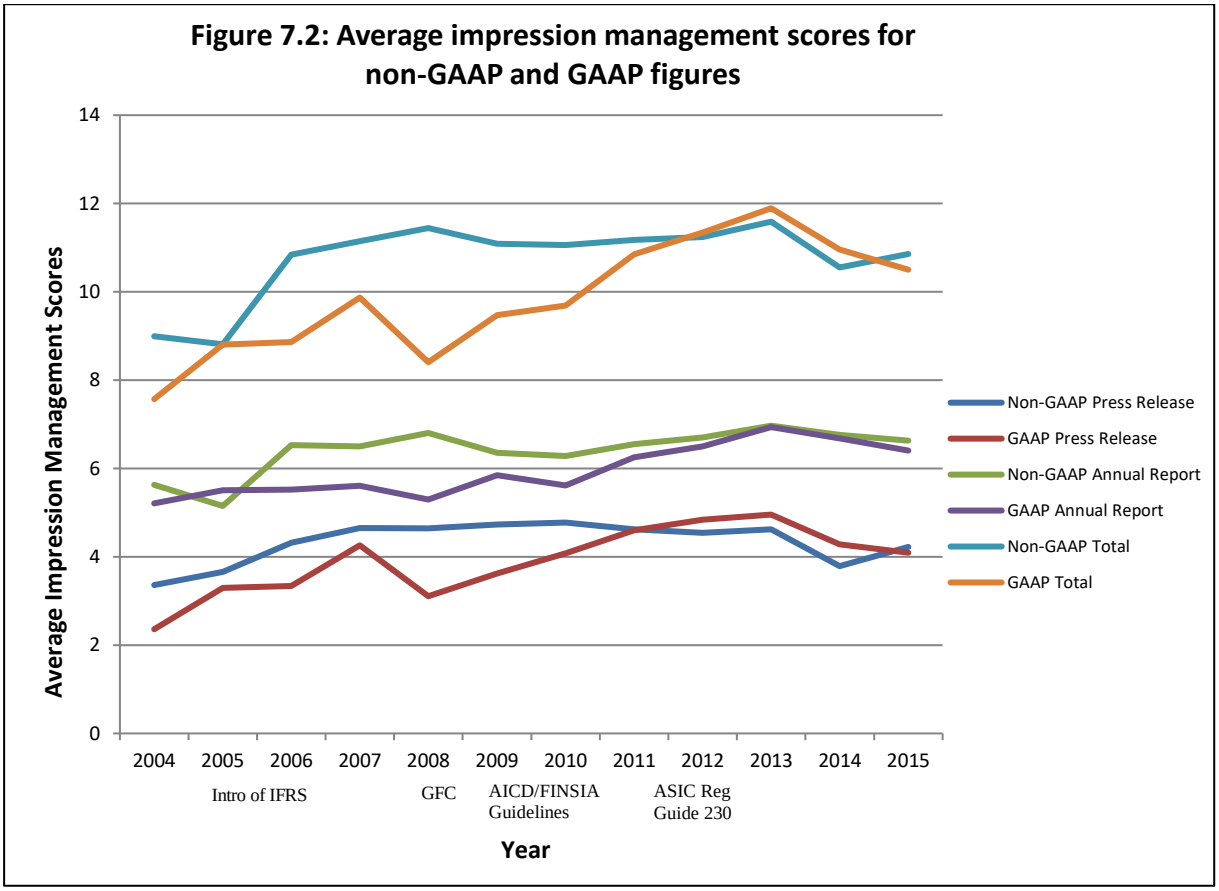
** Significant at the 0.01 level

The relative emphasis in the press release and the total showed a very small increase between 2012 and 2013 but the mean result was still negative indicating that the GAAP figure was still the more emphasised figure. The relative emphasis in both documents and the total decreased between 2012 and 2014 although the difference was not statistically significantly. The year 2014 marked the lowest result for relative emphasis in the press release and total over the course of the study. However, in 2015 this trend was reversed, and the relative emphasis increased to a positive result in the press release, annual report and total. Therefore, in 2015 the relative emphasis score favoured the non-GAAP figure meaning that the GAAP figure, on average, was not given equal or greater prominence contrary to the requirements of the Regulatory Guide.

7.4.6 Additional Analysis for Research Question 4

In order to further dissect and explore the results obtained from the t-tests on the relative emphasis scores discussed above, additional analysis was conducted. Relative emphasis scores are the result of subtracting the total GAAP IM score for emphasis from the total non-GAAP IM score for emphasis. However, the result gives no indication of the size or movement in the IM scores for each type of figure. A relative emphasis score close to zero means the non-GAAP and GAAP IM scores are relatively the same. But any changes in either direction may be due to a change in emphasis of the non-GAAP figure or a change in emphasis of the GAAP figure or both. Therefore, patterns observed in the mean IM scores for each type of figure may help to explain the behaviour of companies concerning emphasis over the twelve years of the study. Figure 7.2 provides some insights into these patterns and shows the mean IM scores for both non-GAAP and GAAP figures for each year for the press release, annual report and total.

Figure 7.2: Average impression management scores for non-GAAP and GAAP figures



Studying the graph reveals that the press release mean IM scores are higher for the non-GAAP figure each year until 2011 when the scores were virtually equal (ASIC Regulatory Guide 230 released in December 2011). From 2012 to 2014 the GAAP figure had a higher mean IM score, but the two results were closely aligned. In 2015 the mean non-GAAP IM score again exceeded the mean GAAP IM score. The graph reveals that for the annual report, the mean GAAP IM score exceeded the mean non-GAAP IM score in 2005, the transition year for IFRS. From that year onwards, the mean non-GAAP IM score exceeded the mean GAAP IM score in every year, even in the years since the release of the ASIC Regulatory Guide 230 (although the scores are very close together from that time).

The IM results from the press release and annual report were then added and are shown in the 'Total' lines on the graph. The mean emphasis score for non-GAAP exceeds the GAAP each year until 2012, when the Regulatory Guide came into effect. However, in 2015 the trend reverses and non-GAAP is again higher. The greatest difference between the mean emphasis scores for the two figures is in 2008, one of the years of the GFC, indicating that the non-GAAP figure was given much greater prominence than the GAAP figure. Since 2006, the year IFRS was fully implemented, the mean total emphasis given to the non-GAAP figure has been reasonably steady, ranging from a high in 2013 ($\overline{x}_{2013}$ =11.59) to a low in 2014 ($\overline{x}_{2014}$ = 10.55). In contrast, the results for the mean total emphasis given to the GAAP figure have fluctuated, ranging from a low in 2008 ($\overline{x}_{2008}$ = 8.41) to a high in 2013 ($\overline{x}_{2013}$ = 11.89). This demonstrates that when the ASIC Regulatory Guide was released companies did not necessarily decrease their emphasis of non-GAAP profits (although this did occur in 2014) but instead increased their emphasis of GAAP profits to make the GAAP figure more prominent. To study the patterns identified in the graph more fully, a series of independent t-tests were conducted on the mean IM scores for both non-GAAP profit figures and GAAP profit figures to determine if any of the changes in reporting around the specific events were statistically significant. The results for each event, beginning with the introduction of IFRS, are discussed below and are presented in tables in each sub-section of the discussion.

7.4.6.1 Introduction of IFRS

Analysis using the relative emphasis scores during the years surrounding the introduction of IFRS in Australia did not yield statistically significant results and Hypothesis 13 was not supported (Section 7.4.2). Table 7.10 disaggregates the relative emphasis score and provides the results for the non-GAAP and GAAP IM scores individually, thereby giving a better understanding of the movements in the individual components of the score. The emphasis placed on non-GAAP figures generally increased during the years under investigation (see Panel A, Table 7.10). The only decrease in emphasis on non-GAAP during this time was in the annual report which was responsible for the decrease in the total between 2004 and 2005. This increase in emphasis on non-GAAP figures was statistically significant ($p < 0.05$) for the annual report and the total between 2005 and 2006 and for the press release and the total between 2004 and 2006.

Table 7.10: Effect of introduction of IFRS on impression management scores for non-GAAP and GAAP figures

	Impression Management Score		
	Press Release	**Annual Report**	**Total**
Panel A: Non-GAAP (predicted sign +)			
2005 Mean	3.6604	5.1509	8.8113
2004 Mean	3.3600	5.6300	8.9900
Difference	0.30038	-0.47906	-0.17868
	t (101) = 0.503, p = 0.308	t (101) = -0.755, p = 0.226	t (101) = -0.177, p = 0.430
2006 Mean	4.3158	6.5263	10.8421
2005 Mean	3.6604	5.1509	8.8113
Difference	0.65541	1.37537	2.03078
	t (108) = 1.110, p = 0.135	t (108) = 2.361, p = **0.010***	t (108) = 2.045, p = **0.022***
2006 Mean	4.3158	6.5263	10.8421
2004 Mean	3.3600	5.6300	8.9900
Difference	0.95579	0.89632	1.85211
	t (105) = 1.730, p = **0.044***	t (105) = 1.497, p = 0.069	t (105) = 1.995, p = **0.025***
Panel B: GAAP (predicted sign -)			
2005 Mean	3.2925	5.5094	8.8019
2004 Mean	2.3600	5.2100	7.5700
Difference	0.93245	0.29943	1.23189
	t (101) = 1.796, p = **0.038***	t (101) = 0.414, p = 0.340	t (101) = 1.180, p = 0.122
2006 Mean	3.3421	5.5175	8.8596
2005 Mean	3.2925	5.5094	8.8019
Difference	0.04965	0.00811	0.05776
	t (108) = 0.090, p = 0.465	t (108) = 0.011, p = 0.496	t (108) = 0.055, p = 0.478
2006 Mean	3.3421	5.5175	8.8596
2004 Mean	2.3600	5.2100	7.5700
Difference	0.98211	0.30754	1.28965
	t (104) = 1.970, p = **0.026***	t (105) = 0.416, p = 0.339	t (105) = 1.264, p = 0.105

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

The emphasis on GAAP figures (see Panel B, Table 7.10) also increased in the press release, annual report and total for the years under comparison surrounding the introduction of IFRS. This increase in emphasis was statistically significant ($p < 0.05$) for the press release between 2004 and 2005 and 2004 and 2006. Therefore, although there were some statistically significant increases in the emphasis of non-GAAP profits through location and repetition of the figures during the years surrounding the introduction of IFRS, there were also some statistically significant increases in the emphasis of GAAP figures. The increase in emphasis of both figures explains the lack of statistical significance in the relative emphasis scores as discussed in Section 7.4.2.

7.4.6.2 The Global Financial Crisis

The results for Hypothesis 14 (Section 7.4.3) showed a statistically significant increase in relative emphasis for the press release only, between the years 2007 and 2008, see Table 7.7. The other results for relative emphasis during this period were not statistically significant. The results for the disaggregation of the relative emphasis score into IM scores for both non-GAAP profit figures and GAAP profit figures are shown in Table 7.11. Although the results for relative emphasis showed a statistically significant increase in emphasis of the non-GAAP profit figure over the GAAP profit figure between 2007 and 2008 (see Table 7.7), Panel A of Table 7.11 shows that there were no statistically significant differences in the emphasis of non-GAAP figures during this time. In fact, the mean emphasis of non-GAAP figures actually decreased for the press release between 2007 and 2008. However, there was a statistically significant decrease ($p < 0.05$) in emphasis of the GAAP figure in the press release (see Panel B, Table 7.11) between 2007 and 2008 which is responsible for the statistically significant increase in relative emphasis in the press release for this period. Therefore, rather than increasing the emphasis on non-GAAP figures in the press release during this time companies simply decreased their emphasis on GAAP.

Table 7.11: Effect of the Global Financial Crisis on impression management scores for non-GAAP and GAAP figures

	Impression Management Score		
	Press Release	**Annual Report**	**Total**
Panel A: Non-GAAP (predicted sign +)			
2008 Mean 2007 Mean Difference	4.6406 4.6491 -0.00850 *t* (119) = -0.016, *p* = 0.494	6.8047 6.5000 0.30469 *t* (119) = 0.545, *p* = 0.294	11.4453 11.1491 0.29619 *t* (119) = 0.331, *p* = 0.371
2009 Mean 2008 Mean Difference	4.7319 4.6406 0.09126 *t* (131) = 0.191, *p* = 0.425	6.3551 6.8047 -0.44962 *t* (131) = -0.747, *p* = 0.228	11.0870 11.4453 -0.35836 *t* (131) = -11.4453, *p* = 0.340
2009 Mean 2007 Mean Difference	4.7319 4.6491 0.08276 *t* (124) = 0.152, *p* = 0.440	6.3551 6.5000 -0.14493 *t* (124) = -0.235, *p* = 0.408	11.0870 11.1491 -0.06217 *t* (124) = -0.064, *p* = 0.475
Panel B: GAAP (predicted sign -)			
2008 Mean 2007 Mean Difference	3.1094 4.2632 -1.15378 *t* (119) = -1.915, *p* = **0.029***	5.2969 5.6053 -0.30839 *t* (119) = -0.467, *p* = 0.321	8.4063 9.8684 -1.46217 *t* (119) = -1.375, *p* = 0.086
2009 Mean 2008 Mean Difference	3.6232 3.1094 0.51381 *t* (131) = 0.997, *p* = 0.161	5.8478 5.2969 0.55095 *t* (131) = 0.915, *p* = 0.181	9.4710 8.4063 1.06476 *t* (131) = 1.131, *p* = 0.130
2009 Mean 2007 Mean Difference	3.6232 4.2632 -0.63997 *t* (124) = -1.130, *p* = 0.130	5.8478 5.6053 0.24256 *t* (124) = 0.375, *p* = 0.354	9.4710 9.8684 -0.39741 *t* (124) = -0.386, *p* = 0.350

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported *p* values are one-tailed for variables with a directional prediction and two-tailed otherwise.

* Significant at the 0.05 level

** Significant at the 0.01 level

7.4.6.3 Introduction of AICD and FINSIA Guidelines on Underlying Profit

The results for Hypothesis 15 on relative emphasis surrounding the release of the AICD and FINSIA guidelines on underlying profits did not yield statistically significant results (Section 7.4.4). Although the relative emphasis did decrease between 2008 and 2009 and between 2008 and 2010 in both documents, the decrease was not statistically significant, see Table 7.8. In disaggregating the results for relative emphasis into IM scores for the non-GAAP and GAAP profit figures, the emphasis on the non-GAAP figure decreased in the annual report during this time, (see Panel A, Table 7.12). However, the emphasis on the non-GAAP figure actually increased in the press release over the period. The emphasis of the GAAP figure (see Panel B, Table 7.12) also increased, and to a greater extent, in the press release in each of the year comparisons and this had the overall effect of decreasing the relative emphasis (see Table 7.8).

Table 7.12: Effect of introduction of AICD and FINSIA Guidelines on Underlying Profit on impression management scores for non-GAAP and GAAP figures

	Impression Management Score – non-GAAP		
	Press Release	**Annual Report**	**Total**
Panel A: Non-GAAP (predicted sign -)			
2009 Mean 2008 Mean Difference	4.7319 4.6406 0.09126 t (131) = 0.191, p = 0.425	6.3551 6.8047 -0.44962 t (131) = -0.747, p = 0.228	11.0870 11.4453 -0.35836 t (131) = -11.4453, p = 0.340
2010 Mean 2009 Mean Difference	4.7746 4.7319 0.04276 t (138) = 0.085, p = 0.467	6.2817 6.3551 -0.07338 t (138) = -0.111, p = 0.456	11.0563 11.0870 -0.03062 t (138) = -0.032, p = 0.488
2010 Mean 2008 Mean Difference	4.7746 4.6406 0.13402 t (133) = 0.265, p = 0.396	6.2817 6.8047 -0.52300 t (130) = -0.851, p = 0.198	11.0563 11.4453 -0.38897 t (129) = -0.434, p = 0.333
Panel B: GAAP (predicted sign +)			
2009 Mean 2008 Mean Difference	3.6232 3.1094 0.51381 t (131) = 0.997, p = 0.161	5.8478 5.2969 0.55095 t (131) = 0.915, p = 0.181	9.4710 8.4063 1.06476 t (131) = 1.131, p = 0.130
2010 Mean 2009 Mean Difference	4.0775 3.6232 0.45428 t (138) = 0.944, p = 0.174	5.6127 5.8478 -0.23515 t (138) = -0.398, p = 0.346	9.6901 9.4710 0.21913 t (138) = 0.246, p = 0.403
2010 Mean 2008 Mean Difference	4.0775 3.1094 0.96809 t (133) = 1.885, p = 0.031	5.6127 5.2969 0.31580 t (133) = 0.523, p = 0.301	9.6901 8.4063 1.28389 t (133) = 1.398, p = 0.083

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.
* Significant at the 0.05 level
** Significant at the 0.01 level

7.4.6.4 Introduction of ASIC Regulatory Guide 230

Hypothesis 16 (Section 7.4.5) concerned the release of the ASIC Regulatory Guide 230 and showed a statistically significant decrease in the relative emphasis in press releases between 2010 and 2012, see Table 7.9. Disaggregated results for the individual IM scores are presented in Table 7.13. During the years surrounding the release of the Guide, the emphasis on non-GAAP figures decreased in the press release but actually increased in the annual report and overall (see Panel A, Table 7.13). It was once again the increase in emphasis on the GAAP figures that had the larger effect on the overall result, with this increase statistically significant ($p < 0.05$) in the total between 2010 and 2012 (see Panel B, Table 7.13). The emphasis on non-GAAP figures increased slightly across the documents and total between

Table 7.13: Effect of introduction of ASIC Regulatory Guide 230 on impression management scores for non-GAAP and GAAP figures

	Impression Management Score – non-GAAP		
	Press Release	**Annual Report**	**Total**
Panel A: Non-GAAP (predicted sign -)			
2011 Mean	4.6250	6.5486	11.1736
2010 Mean	4.7746	6.2817	11.0563
Difference	-0.14965	0.26692	0.11727
	t (141) = -0.297, p = 0.384	t (141) = 0.408, p = 0.342	t (141) = 0.123, p = 0.451
2012 Mean	4.5400	6.7000	11.2400
2011 Mean	4.6250	6.5486	11.1736
Difference	-0.08500	0.15139	0.06639
	t (145) = -0.171, p = 0.432	t (145) = 0.245, p = 0.403	t (145) = 0.072, p = 0.472
2012 Mean	4.5400	6.7000	11.2400
2010 Mean	4.7746	6.2817	11.0563
Difference	-0.23465	0.41831	0.18366
	t (113) = -0.452, p = 0.326	t (144) = 0.658, p = 0.256	t (121) = 0.192, p = 0.424
2013 Mean	4.6203	6.9684	11.5886
2012 Mean	4.5400	6.7000	11.2400
Difference	0.08025	0.26835	0.34861
	t (152) = 0.168, p = 0.434	t (152) = 0.466, p = 0.321	t (152) = 0.396, p = 0.347
2014 Mean	3.7898	6.7614	10.5511
2012 Mean	4.5400	6.7000	11.2400
Difference	-0.75023	0.06136	-0.68886
	t (161) = -1.554, p = 0.061	t (161) = 0.108, p = 0.457	t (161) = -0.774, p = 0.220
2015 Mean	4.2267	6.6279	10.8547
2012 Mean	4.5400	6.7000	11.2400
Difference	-0.31326	-0.07209	-0.38535
	t (159) = -0.697, p = 0.244	t (159) = -0.127, p = 0.450	t (159) = -0.463, p = 0.322
Panel B: GAAP (predicted sign +)			
2011 Mean	4.5972	6.2500	10.8472
2010 Mean	4.0775	5.6127	9.6901
Difference	0.51976	0.63732	1.15708
	t (122) = 1.098, p = 0.137	t (141) = 1.115, p = 0.134	t (125) = 1.378, p = 0.085
2012 Mean	4.8400	6.5000	11.3400
2011 Mean	4.5972	6.2500	10.8472
Difference	0.24278	0.25000	0.49278
	t (145) = 0.509, p = 0.306	t (145) = 0.454, p = 0.325	t (145) = 0.594, p = 0.277
2012 Mean	4.8400	6.5000	11.3400
2010 Mean	4.0775	5.6127	9.6901
Difference	0.76254	0.88732	1.64986
	t (113) = 1.577, p = 0.059	t (144) = 1.556, p = 0.061	t (121) = 1.924, p = **0.028***
2013 Mean	4.9557	6.9367	11.8924
2012 Mean	4.8400	6.5000	11.3400
Difference	0.11570	0.43671	0.55241
	t (152) = 0.234, p = 0.408	t (152) = 0.880, p = 0.190	t (152) = 0.672, p = 0.252
2014 Mean	4.2784	6.6818	10.9602
2012 Mean	4.8400	6.5000	11.3400
Difference	-0.56159	0.18182	-0.37977
	t (161) = -1.248, p = 0.107	t (161) = 0.353, p = 0.362	t (161) = -0.483, p = 0.186
2015 Mean	4.0930	6.4070	10.5000
2012 Mean	4.8400	6.5000	11.3400
Difference	-0.74698	-0.09302	-0.84000
	t (159) = -1.644, p = 0.051	t (159) = -0.179, p = 0.429	t (159) = -1.035, p = 0.151

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.

* Significant at the 0.05 level

** Significant at the 0.01 level

2012 and 2013 but generally decreased between 2012 and 2014 and 2012 and 2015 (the annual report 2012-2014 being an exception with an increase). The emphasis of GAAP figures also increased between 2012 and 2013 but began to decrease between 2012 to 2014 and 2012 to 2015.

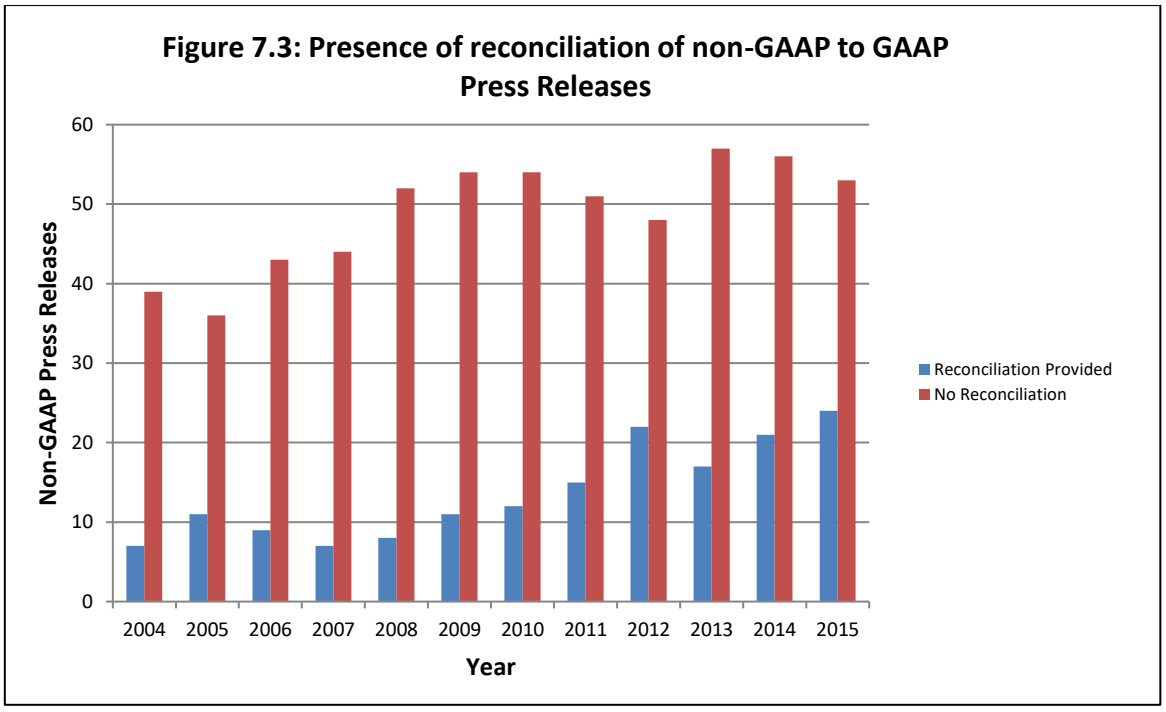
The results in the above sub-sections, which analysed non-GAAP and GAAP figures separately, show that since 2006, impression management tactics relating to emphasis of non-GAAP figures have been reasonably constant. Even the introduction of ASIC Regulatory Guide 230 had little effect on the emphasis scores for non-GAAP figures and companies generally did not decrease the emphasis on these figures. Any statistically significant changes in behaviour since 2006 relate to the GAAP figure which has been less emphasised (during the GFC) or more emphasised (with the introduction of the ASIC Regulatory Guide). The emphasis of this figure seems to be the most affected by the specific events in question.

7.5 Reconciliation of Non-GAAP and GAAP Profit Figures

The use of impression management strategies in the reporting of non-GAAP profit figures can mislead shareholders and potential investors, particularly those that are inexperienced, and can lead to mispricing of securities (Zhang & Zheng 2011). Previous studies have found that the presence and emphasis of non-GAAP profit figures affected the decision making of less sophisticated investors but the presence of a clear reconciliation to the GAAP profit mitigated this effect (Allee et al. 2007; Elliott 2006; Marques 2010; Zhang & Zheng 2011). In line with these findings, both the AICD and FINSIA guidelines on reporting non-GAAP profits, and the ASIC Regulatory Guide 230, recommend the inclusion of a reconciliation between the two figures. The AICD and FINSIA guidelines suggest the reconciliation should be ‘transparent, logical and justifiable’ (AICD & FINSIA 2009, p. 17). The ASIC require significant adjustments to be separately itemised and explained and that the GAAP figure and a reconciliation between the two should appear in each document containing a non-GAAP profit figure (ASIC 2011, p. 20). The presence of a clear and detailed reconciliation is therefore considered imperative for transparency in the calculation of non-GAAP profit figures and to ensure the reporting of the figures in not misleading.

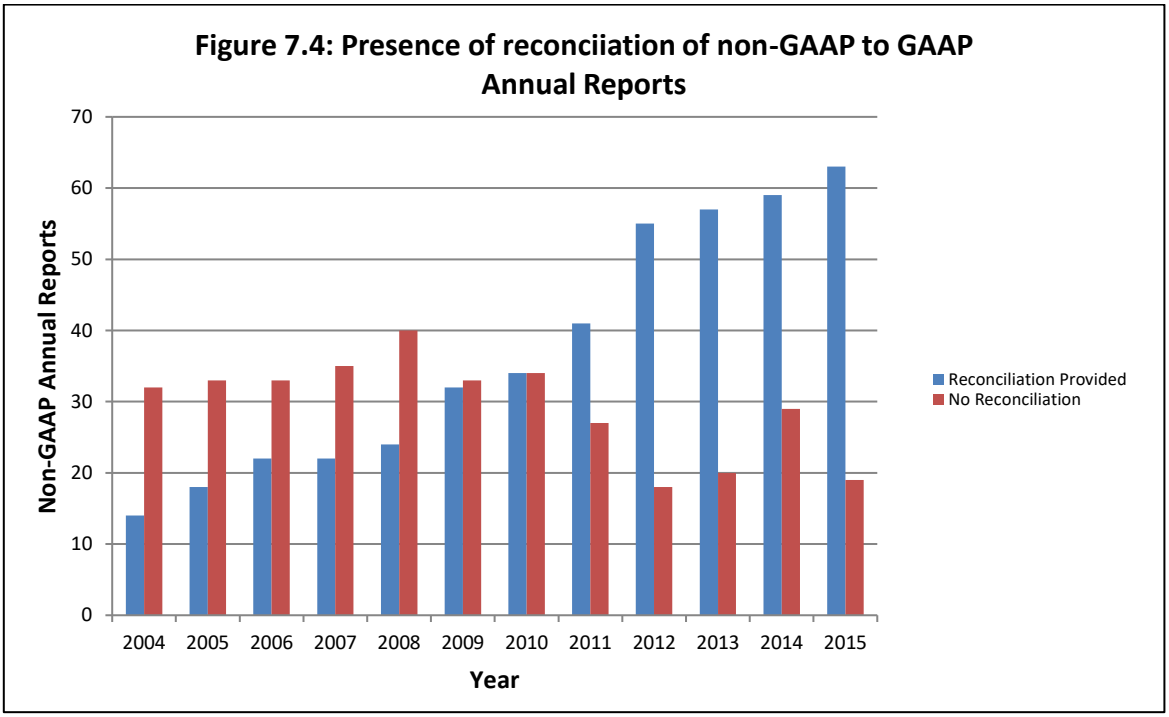
The presence of a reconciliation between non-GAAP and GAAP profit figures does not form part of the impression management index or relative emphasis score calculated in this study. Scores calculated using the IM index need to be equally applicable to both GAAP and non-GAAP figures so as to affect the relative emphasis score in the same manner. However, the presence of a reconciliation in each of the documents under investigation was noted. This is important as the absence of a reconciliation may be an impression management tactic designed to mislead users who cannot clearly see how the non-GAAP profit figure has been calculated. In the later years of the study (2012 to 2015) the lack of a reconciliation reflects non-compliance with the ASIC Regulatory Guide 230. In this study, a reconciliation was deemed to have been provided if an actual reconciliation was included in the document, clearly showing how one figure was deduced from the other figure, with significant adjustments clearly labelled and itemised. Some companies only report a non-GAAP figure in either the press release or in the annual report but not in both documents. Only documents that actually included a non-GAAP figure were used in this part of the analysis.

Figure 7.3 shows the results of the analysis for the presence of a reconciliation in the press release. The results do not show a large variation over the twelve-year period. In 2005 for example, the transition year to IFRS for most of the companies in the study, 23% (11/47) of



the non-GAAP reporters reporting in the press release provided a reconciliation in that document. The percentage dropped in 2007, the year leading into the GFC, to 14% (7/51) and in 2008, the year the GFC peaked, to 13% (8/60). The introduction of the ASIC Regulatory Guide in December 2011 had some effect. However, the highest percentage of companies providing a full reconciliation in the press release was 31% in both 2012 (22/70) and in 2015 (24/77) which is still quite a low percentage of the total companies in the sample.

Figure 7.4 shows the results for the annual report. These results show a much wider range and a steady increase over the twelve years, with a low of 30% (14/46) in 2004 to a high of 77% in 2015 (63/82). The release of the ASIC Regulatory Guide clearly had more effect in the annual report although several companies are still not addressing this requirement.



7.6 Summary

This chapter provided descriptive statistics and results for Research Questions 3 and 4, detailing which hypotheses were supported and which were not supported by the results. It also provided some additional analysis concerning aspects of impression management. Table 7.14 provides a summary of the research questions and hypotheses analysed in this chapter,

along with details of the years in which the hypotheses were supported or not supported. A discussion of the results reported in Chapters 6 and 7 is contained in the next chapter.

Table 7.14: Summary of Results

Research Question	Hypothesis	Supported	Not Supported	Model Not Significant
Research Question 3: *Is the use of impression management tactics when reporting non-GAAP profit figures influenced by specific firm characteristics?*	**H9:** Larger companies are more likely to use impression management tactics when reporting non-GAAP profit figures than smaller companies.	2007 Press Release	Whole Sample Press Release, Total 2004 Annual Report, Total 2009 All 2010 Press Release, Total 2012 Total 2015 Annual Report	Whole Sample Annual Report 2004 Press Release 2005 All 2006 All 2007Annual Report, Total 2008 All 2010 Annual Report 2011 All 2012 Press Release, Annual Report 2013 All 2014 All 2015 Press Release, Total
	H10: Companies with dispersed ownership are more likely to use impression management tactics when reporting non-GAAP profit figures than companies with concentrated ownership.	Whole Sample Total 2007 Press Release	Whole Sample Press Release 2004 Annual Report, Total 2009 All 2010 Press Release, Total 2012 Total 2015 Annual Report	
	H12: Highly leveraged companies are more likely to use impression management tactics when reporting non-GAAP profit figures than lower leveraged companies.	Whole Sample Press Release 2004 Annual Report, Total 2009 Press Release, Annual Report, Total 2010 Press Release, Total	Whole Sample Total 2007 Press Release 2012 Total 2015 Annual Report	
	H11: Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to use impression management tactics when reporting non-GAAP profit figures than companies reporting an increase in GAAP profits.	Whole Sample Press Release, Total 2012 Total	2004 Annual Report, Total 2007 Press Release 2009 All 2010 Press Release, Total 2015 Annual Report	
Research Question 4: *Is the use of impression management tactics when reporting non-GAAP profit figures influenced by specific events?*	**H13:** The use of impression management tactics by companies when reporting non-GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.		2004-2005 2005-2006 2004-2006	
	H14: The use of impression management tactics by companies when reporting non-GAAP profit figures will increase during the Global Financial Crisis.	2007-2008 Press Release	2007-2008 Annual Report, Total 2008-2009 2007-2009	
	H15: The use of impression management tactics by companies when reporting non-GAAP profit figures will decrease with the release of guidelines on reporting underlying profits by AICD and FINSIA.		2008-2009 2009-2010 2008-2010	

Table 7.14: Summary of Results (continued)

Research Question	Hypothesis	Supported	Not Supported	Model Not Significant
	H16: The use of impression management tactics by companies when reporting non-GAAP profit figures will decrease with the release of Regulatory Guide 230 by ASIC.	2010-2012 Press Release	2010-2011 2011-2012 2010-2012 Annual Report, Total	

Chapter 8

Discussion of Findings

8.1 Introduction

The results of the analysis into the reporting of non-GAAP profit figures conducted in this study are discussed in this chapter. Section 8.2 discusses the findings within the context of a general overview into the practice of reporting non-GAAP profit figures in Australia, including their frequency, terminology used for the figures and location within the disclosure documents under investigation. The results for the four research questions and related hypotheses are discussed in Sections 8.3 to 8.6 respectively. Section 8.7 discusses the findings concerning the presence of a reconciliation between non-GAAP and GAAP profit figures and the chapter concludes with a summary in Section 8.8.

8.2 Overview of the Use of Non-GAAP Profit Figures in Australia

The reporting of non-GAAP profit figures and other non-GAAP financial information is voluntary in Australia. Over the past two decades, management have generally had wide discretion as to what figures to report and how to calculate them, as well as how to report them with regard to emphasis and location. Although this discretion has been tempered somewhat with the release of the ASIC Regulatory Guide 230 in 2011, companies are still able to choose whether to report or not to report a non-GAAP figure, what to exclude from the calculation and how much emphasis to give the non-GAAP figure (the ASIC guide only requires that GAAP be given equal or greater prominence and does not dictate how much prominence should be given to the non-GAAP figure). Importantly these non-GAAP profit figures are usually unaudited. Those in favour of reporting non-GAAP figures argue that the figures represent underlying, core or operating earnings which are more likely to persist in the future (Black et al. 2012), and are more informative, enabling analysts and shareholders to better evaluate a company's performance (Entwistle, Feltham & Mbagwu 2004). Others are concerned about the lack of transparency, definition, terminology used and consistent format of non-GAAP profit figures, which makes comparison between companies difficult (Brody & McDonald 2004; Halsey & Soybel 2002; Heitger & Ballou 2003) with the figures being both

company-specific and time-specific (Bryan & Lilien 2004; Sek & Taylor 2011). The discussion in this section relates to some general insights identified by this study into the practice of reporting non-GAAP profit figures in Australia, including their frequency, location, terminology used, and amount compared to GAAP profits as well as the effect of industry sector on the practice.

8.2.1 Frequency of Non-GAAP Profit Figures and EBIT/EBITDA

The frequency of the reporting of both non-GAAP profit figures and EBIT/EBITDA figures by Australian companies has changed over the twelve-year period covered by this study (see Figure 6.1 and Appendix 4). The practice of reporting non-GAAP profit figures has become entrenched in the Australian financial reporting landscape. In 2004, only 46% of the companies in the research sample reported a non-GAAP figure. This percentage increased each year of the study to a high of 81% in 2014. In fact, 2015 saw the only decrease in the number of companies in the sample reporting a non-GAAP profit with two less companies reporting a figure than in 2014. Unlike in the US, where the introduction of regulation concerning the reporting of non-GAAP profits saw a significant decrease in the number of companies reporting the figures (Entwistle, Feltham & Mbagwu 2006a; Marques 2006), the release of the ASIC Regulatory Guide 230 did not have a similar effect on the practice in Australia.

The reporting of an EBIT and/or EBITDA figure (not included in the definition of non-GAAP profit figures for this study) has also increased over the twelve years, although to a lesser degree than non-GAAP profits, from 61% in 2004 to 76% in 2015. EBIT and EBITDA are commonly used earnings figures which are generally understood by investors and were in use long before the trend in non-GAAP earnings began in the late 1990s (Allee et al. 2007; Bhattacharya et al. 2003; Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2006b, 2010; Malone, Tarca & Wee 2016). Many companies in the sample have chosen to continue the reporting of these figures and at the same time report additional non-GAAP profit figures, thereby providing a range of different earnings figures each year in addition to the GAAP profit calculated under IFRS. Some companies, for example Arrium Ltd (OneSteel) in 2009, reported not only EBIT, EBITDA and a non-GAAP profit (‘underlying

net profit after tax' in this case) but also an 'underlying EBIT' and 'underlying EBITDA', adding to the ambiguity of earnings reported and the possibility of misleading less experienced shareholders and investors. In the last three years of the study (2013 to 2015), the number of companies reporting a non-GAAP profit equalled or exceeded those reporting EBIT and/or EBITDA, another indication of the increasing popularity of reporting non-GAAP profit figures. EBIT and EBITDA are clearly calculated as 'earnings before' specific items, namely interest, taxation, depreciation and amortisation. Non-GAAP profit figures, however, are more ambiguous and give companies more flexibility as to the calculation and items to exclude, leading Brody and McDonald (2004, p. 37) to suggest that companies can report earnings 'any way they want'. From an opportunistic behaviour perspective, this can explain the increased popularity of using non-GAAP figures in addition to, or instead of, EBIT and EBITDA.

8.2.2 Industry

Descriptive statistics for industry are reported in Section 6.3.2. Industry type may influence disclosure of non-GAAP profits due to a range of factors, including the requirements and effect of various accounting standards. Companies, particularly those with a high proportion of intangible assets, may wish to provide extra information beyond the GAAP profit figure. Industry patterns may also exist, where companies mimic what their competitors in the same industry are doing with regards disclosure. Previous studies have found that firms in technology or business services industries have the highest rates of disclosure of non-GAAP profits (e.g. Bhattacharya et al. 2004; Entwistle, Feltham & Mbagwu 2004; Johnson & Schwartz 2005; Lougee & Marquardt 2004; Marques 2010). Lougee and Marquardt (2004) relate this finding to high technology firms having a large proportion of intangibles.

This study grouped companies according to their GICS industry sector with some sectors have a small representation in the final sample. Industries with a consistently high proportion of non-GAAP reporters included Financials and Real Estate, which often excluded unrealised losses and impairment of intangibles from the non-GAAP figure. Energy and Industrials showed the largest increase in the number of companies reporting non-GAAP profits over the 12 years. This may be due to industry patterns where companies in the one industry are

mimicking their competitors. Impairment of acquired intangibles is a common difference between non-GAAP and GAAP profits for these companies.

8.2.3 Location of Non-GAAP Profit Figures

Figure 6.2 and Appendix 5 detail results on the location of non-GAAP profit figures in the annual results press release and the annual report. When reporting a non-GAAP figure, the press release was clearly the favoured location by most of the companies in the sample (noting that not all companies issue an annual results press release). Studies have shown that the first piece of information to which people are exposed strongly influences their understanding and biases their evaluation of subsequent information (Asch 1946; Hirshleifer & Teoh 2003; Huang, Nekrasov & Teoh 2012; Lim, Benbasat & Ward 2000). From an impression management perspective, companies would wish to highlight their non-GAAP profits, particularly if the figures are more favourable than GAAP, and would therefore report and emphasise them in the timeliest manner possible, that is, in the unaudited press release.

In 2008 for example, 44 out of the 60 non-GAAP reporters that used the press release to report the figure emphasised the non-GAAP figure more than the GAAP. Twelve of these companies not only emphasised the non-GAAP figure but did not actually report the GAAP figure in the body of the press release. Of these twelve companies, ten had a higher non-GAAP than GAAP figure. These ten companies were clearly emphasising the more favourable result and not giving shareholders and prospective investors the opportunity to compare the non-GAAP figure to the result obtained under IFRS. The annual report must contain the GAAP or IFRS profit and usually contains both figures for companies reporting non-GAAP profits. This document is released several weeks after the press release, making it a less timely document for impression management purposes.

In the annual report, the narrative sections located before the financial statements were the most common location for non-GAAP profit reporting. This part of the annual report is considered an effective setting for using impression management tactics as content of the narrative sections lies with the preparers and the sections are often not audited (Neu, Warsame & Pedwell 1998). The Directors' Report or Review of Operations was the most favoured

location most years closely followed by the Chairman's or CEO letter and then the highlights section at the beginning of the annual report (noting not all companies had such a section). Very few companies reported non-GAAP profit figures directly in the financial statements with the percentage of non-GAAP reporters that used this section decreasing from 13% in 2005 to only 2% in 2015 (Figure 6.2). The decrease in the latter years of the study can be explained by the ASIC Regulatory Guide 230 not allowing non-GAAP information to be included in financial statements, particularly the statement of comprehensive income (ASIC 2011, p. 9). However, the use of the Notes to the Financial Statements section to report non-GAAP profits increased in frequency from 16% in 2004 to 36% in 2015. This can be explained by the ASIC Regulatory Guide requirement to reconcile the non-GAAP and GAAP figures, with several companies choosing to do this as part of the notes.

8.2.4 Terminology Used

Concerns have been raised with regards to the wide variety of terminology used by different companies, and within companies across different years, when reporting non-GAAP profit figures (Brody & McDonald 2004; Heitger & Ballou 2003). This was clearly an area of concern for the AICD and FINSIA, with the second principle in their *Underlying Profit: principles for reporting of non-statutory profit information* concerning the use of terminology. The principle states 'Principle 2 – Use the term "underlying profit"' and explains that for consistency between companies, and to promote certainty for the investment community, the term 'underlying profit' should be used in preference to other terms (AICD & FINSIA 2009, p. 15). This term is viewed by the professional bodies as more neutral concerning future expectations. Terms such as 'normalised' and 'sustainable' are discouraged as they have connotations for some investors and shareholders 'regarding "smoothing" of profit or adjustments based on management's judgements' (AICD & FINSIA 2009, p. 16).

The results from this study highlight several areas of concern regarding terminology used by Australian companies over the years of the study. Firstly, the many different terms used by different companies makes it confusing and difficult for shareholders and investors to compare companies as they are not sure whether they are comparing the same, similar or different types of figures. Although the terminology used by companies has been organised

into ten key terms for the purpose of reporting the results in this study, the actual names given to the non-GAAP profits by companies were very diverse, particularly in the early years of the study. In 2004 and 2005, 'profit after tax before' was the most common key term used, but even this term had a number of possible endings meaning there was still a variety of names in this category. The AICD and FINSIA guidelines obviously had an effect on companies, with the term 'underlying' increasing in use from five companies or 10% of non-GAAP reporters in 2004 to 44 companies or 51% of non-GAAP reporters in 2015. However, although the term 'underlying' had been adopted by half the companies in the sample by 2015, there were still companies using terms in each of the other nine key term categories, meaning shareholders and prospective investors were still faced with a wide variety of terminology being used. For example, five companies in the sample were still using the term 'normalised' in 2015 despite the concerns of the AICD and FINSIA about the term.

A second area of concern is some companies changing the term they use from year to year making comparisons for the one company between years difficult. There are companies such as Fairfax Media Ltd that have not changed terms and therefore provide some certainty for shareholders by consistently using the same term, in this case 'underlying net profit after tax', for the entire period of the study. However, there are other companies that regularly change the term they use with one of the more extreme examples being TPG Telecom Ltd using five different terms in the six years in which they reported a non-GAAP profit (Section 6.3.4). This practice would lead shareholders to question whether the non-GAAP figures reported from year to year were comparable in any regard, or completely different figures as far as calculation and exclusions are concerned.

Thirdly, it is a concern that several companies use more than one term to describe the same non-GAAP figure in the same year. Section 6.3.4 provides many examples of this practice, with two or more terms used in various locations in the documents under investigation in the one year. An example of this can be seen in the 2006 documents for Downer EDI Ltd. The non-GAAP figure of $137,775,000 (or $138 million) is called both 'profit after tax (before provisions)' and 'underlying profit' on the first page of the four-page press release. In the annual report the same figure is variously called 'profit after tax (before provisions)', 'underlying profit after tax', 'operating profit after tax', 'underlying profit', 'excluding one-

offs, after tax profit' and 'profit after tax before significant one-off items'. Using such a variety of terminology for the one figure is confusing, particularly for the unsophisticated shareholder or investor, and it is hard to explain this as anything other than opportunistic behaviour designed to mislead.

While some companies used a range of terms for the one figure, others reported a range of different non-GAAP figures all with different names. Reiterating one example given in Section 6.3.4, Invocare Ltd in 2009 reported a 'normalised profit after tax' of $33.5 million, an 'underlying profit' and 'operating profit after tax' (used two different terms for same figure) of $31.9 million and an EBITDA of $65.2 million. All these figures differ from the IFRS profit. The ASIC Regulatory Guide expresses concern over this practice stating that 'providing multiple non-IFRS profit measures in the same reporting period where that may cause confusion' is an example of a practice that is 'potentially misleading' (ASIC 2011, p. 21).

The most concerning aspect of terminology use was the practice of a few companies to use the term 'net profit after tax' or 'net profit' to label non-GAAP figures. Although this practice was uncommon, it is of concern as there was usually no indication that the figure being discussed was a non-GAAP figure. The instances observed occurred prior to the release of the ASIC Regulatory Guide which disallows the practice with the second guideline stating:

> Appropriate label: Non-IFRS financial information should be clearly labelled in a way that distinguishes it from the corresponding IFRS financial information. Any term used to describe the information should be appropriate given the nature of the information. The term or label should not be apt to cause confusion with IFRS financial information (ASIC 2011, p. 18).

Although changes in the use of terminology have been observed over the twelve-year period, such as the increased use of 'underlying profit' as suggested by the AICD and FINSIA guidelines, there is still room for improvement in this regard.

8.2.5 Amount of Non-GAAP Profit versus GAAP Profit

Previous studies have found that the majority of companies reporting non-GAAP profit figures calculate an amount higher than the GAAP profit or loss for the period (Entwistle, Feltham & Mbagwu 2004; James & Michello 2003; KPMG 2010b). This was the case in this study in ten of the twelve years, with the only exceptions being 2006 and 2007 (see Section 6.3.5). In 2004 and 2005 there was a smaller majority than in the years following 2007. In 2004, for example, there were 29 companies where the non-GAAP figure exceeded the GAAP figure and 21 where the GAAP figure was higher, a difference of eight companies. The results over these first four years of the study would have been influenced by the introduction of IFRS. Disclosure in general around these years had an IFRS focus, including the effects of adopting IFRS, and greater scrutiny would have been applied by shareholders and other stakeholders to any disclosure. Although it is predicted that companies would disclose non-GAAP figures around this time, the requirements concerning additional disclosure about the adoption of IFRS would have curbed opportunistic behaviour concerning the calculation of non-GAAP figures as there was a requirement for more transparency at this time.

During two of the years affected by the GFC (2008 and 2009), the number of companies where the non-GAAP figure was higher than the GAAP figure far exceeded those where GAAP was the higher figure. In 2009, 56 companies reported a higher non-GAAP figure than the GAAP figure with only 13 reporting a higher GAAP figure. In fact, the greatest majority of higher non-GAAP reporters was in 2009 with 43 more companies having a higher non-GAAP figure than the companies where the GAAP figure was higher. During times of economic downturn, companies would attempt to allay fears of shareholder and prospective investors and therefore disclose non-GAAP profits that are more indicative of future cash flows (amounts which do not necessarily reflect the effects of the poor economic conditions of the time).

The greatest majority of companies reporting a non-GAAP profit figure higher than the GAAP profit was repeated in 2012, the year immediately following the release of the ASIC Regulatory Guide 230. This is a surprising result given the findings of US studies concerning the reaction of companies to regulation surrounding non-GAAP profits in that country.

Studies in the US not only found a decrease in the number of companies reporting a non-GAAP profit after regulation (a result not observed in this study in Australia) but also a change in the magnitude and type of variations made to GAAP figures. The US studies found a sharp decrease in the difference between non-GAAP and GAAP earnings per share (Entwistle, Feltham & Mbagwu 2006a; Heflin & Hsu 2008) and a significant decrease in the proportion of firms reporting a non-GAAP figure greater than the GAAP figure (85% in 2001 to 67% in 2003 for earnings per share figures) (Entwistle, Feltham & Mbagwu 2006a).

The mean non-GAAP profit was higher than the mean GAAP profit in every year of the study except 2006 and 2007 (Section 6.3.5). The anomaly in these years may be explained by the introduction of IFRS, with 2006 being the first year that all companies had to report fully under the regime. The greatest differences were in 2009 and 2015. The trend over the years in the non-GAAP profit showed that the mean was reasonably consistent or 'smooth' after the introduction of the ASIC Regulatory Guide in 2011/12. This may be due in part to the requirement to provide a full reconciliation between the figures from that time and thereby clearly disclose how the non-GAAP figure was calculated. This would have prompted companies to consider carefully what to exclude from the GAAP profit to calculate the non-GAAP profit, and these exclusions would have to be consistent from year to year as the reconciliation would make their practices more transparent. Studies in the US found a sharp decrease in the difference between non-GAAP and GAAP figures post regulation (Entwistle, Feltham & Mbagwu 2006a; Heflin & Hsu 2008) but Figure 6.4 (Section 6.3.5) showed that this was not the case in this study. Although the average non-GAAP profit figures became more consistent, the difference between the non-GAAP and GAAP figure did not decrease significantly post regulation.

8.3 Research Question 1 – Influence of Company Characteristics on Non-GAAP Reporting

The conceptual model for this study developed in Chapter 4 (Figure 4.1) predicted that management of companies would undertake various forms of voluntary disclosure to overcome information asymmetry and attempt to bond with shareholders. The calculation and disclosure of a non-GAAP profit figure is one such form of voluntary disclosure. Although

there are benefits of voluntary disclosure (Section 2.2.2), there are also costs associated with the practice (Section 2.2.3) and not all companies are likely to voluntarily report non-GAAP profit figures. The first two research questions investigated whether company characteristics and specific events influenced a company's decision to report a non-GAAP profit figure. Research Question 1 concerned the influence certain company characteristics had on the decision to report non-GAAP profit figures. The question investigated four characteristics which are discussed below.

8.3.1 Size

Hypothesis 1 concerned the size of a company and predicted:

> *Larger companies are more likely to report non-GAAP profit figures than smaller companies.*

Agency theory espouses that issues of information asymmetry and the associated agency costs are exacerbated by company size due to larger companies being more complex and having a wider ownership base (Fama & Jensen 1983b; Jensen & Meckling 1976; Meek, Roberts & Gray 1995). The monitoring function is therefore more difficult in larger companies and managers may voluntarily disclose extra information such as non-GAAP profits to bond themselves to shareholders. Previous literature has also suggested that larger companies are better able to bear the costs involved in voluntary disclosure (Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995). Although the majority of previous studies concerning non-GAAP profits have not investigated the effect of characteristics such as size, the few that have done so have found size to be significant with larger companies more likely to report the figures (Johnson & Schwartz 2005; Malone, Tarca & Wee 2016; Marques 2010).

In this study, results from univariate tests and multivariate logistic regression indicated companies reporting a non-GAAP figure are statistically significantly larger than those not reporting such a figure for the total sample, and for the years 2004 to 2007 and 2009 to 2012. This finding supports the arguments put forward using agency theory. Therefore, the results support this hypothesis for the total sample and all the years of the study except 2008 and the last three years (2013-2015). The year 2008 was one of the years most affected by the GFC

and factors other than size may have affected the decision to report a non-GAAP figure during that time of economic downturn.

The fact that the variable was not statistically significant for the years 2013 to 2015 may be due to the sample itself rather than any particular anomaly to do with events during those years. The size of the companies, as measured by market capitalisation, grew each year, with the minimum value for the last three years being much higher than earlier years of the study (see Table 6.2). The standard deviation of the log of market capitalisation (the proxy used for size) decreased over the period of the study with the last three years being the lowest. For example, in the year 2004, the first year of the study, the log of market capitalisation had a mean of $\overline{x}_{2004} = 8.8734$ and a standard deviation of $s_{2004} = 0.8881$. In 2014 the mean was $\overline{x}_{2014} = 9.4225$ and the standard deviation had decreased to $s_{2014} = 0.5722$ (similar results can be seen in 2013 and 2015, see Table 6.4). This means the range of sizes in those years was smaller and this may have affected the result for this variable.

8.3.2 Ownership Concentration

Hypothesis 2 concerned ownership concentration and predicted:

> *Companies with dispersed ownership are more likely to report non-GAAP profit figures than companies with concentrated ownership*

From an agency theory perspective, larger shareholders have more incentive and are better able to monitor and influence management. As smaller shareholders are less able to influence management and may be less 'sophisticated' or experienced, information asymmetry is higher for these shareholders. Therefore, it was argued management may provide extra incremental information in the form of non-GAAP profits in order to bond with these smaller shareholders in companies with more dispersed ownership. The results from this study are pertinent as previous studies concerning non-GAAP profits have failed to investigate this characteristic. The results for the total sample were in the predicted direction but were not statistically significant. This was also the case for many individual years with the results being in the predicted direction (companies reporting a non-GAAP profit figure were more dispersed than companies not reporting a figure) but not statistically significant. The results were statistically

significant, and the hypothesis is supported, in only four of the twelve years of the study; 2006, 2009, 2013 and 2014.

The year 2006 was the first year companies had to report fully under IFRS. As there were a number of major differences between existing Australian Accounting Standards and IFRS, the adoption of IFRS 'had major implications for how financial accounting is undertaken within Australia' (Deegan 2010, p. 7) and the change to IFRS compelled companies to adopt different ways of expressing earnings and profits (Deloitte 2009). One way would have been to provide extra information in the form of non-GAAP profits as the profit calculated under IFRS would have varied considerably from the profits reported in previous years. This would have been a particular concern for companies with more dispersed shareholdings, particularly as smaller, less sophisticated shareholders would have struggled to understand the differences that had occurred, and this would account for the statistically significant result for ownership concentration in this year.

In 2009 the AICD and FINSIA Guidelines on underlying profits were released and encouraged companies to 'recognise that the different users of financial reports have different information needs' (AICD & FINSIA 2009, p. 8). The guidelines state that both AICD and FINSIA 'believe that companies should consider what supplementary information could be provided to assist shareholders and the wider investment community in understanding the company's financial position and performance' (AICD & FINSIA 2009, p. 10). The release of these guidelines prompted management to consider the needs of smaller shareholders and this could explain the significant effect ownership concentration had on the decision to report a non-GAAP profit figure for this year.

The other two years in which the variable was statistically significant were 2013 and 2014. These years are post the release of the ASIC Regulatory Guide 230 (released in December 2011 so effective for most companies from 2012). The release of the Regulatory Guide would have forced companies to reconsider the reporting of non-GAAP profits in a deliberate and strategic manner as they would now face scrutiny from ASIC. The Regulatory Guide was issued in part to 'promote more meaningful communication of financial information to

investors and other users of financial reports' and to make sure non-IFRS information 'is not misleading' (ASIC 2011, p. 4). As ownership concentration was significant, and in the predicted direction, this indicates that it was a factor in the decision to report or not report a non-GAAP figure in these two years, prompted by the calls of ASIC to consider investors' needs. However, it should be noted that this variable was not statistically significant in 2012 or 2015, which were also post-ASIC Regulatory Guide years. This implies other factors played a greater role in the decision to report in those years.

Although the arguments put forward using agency theory predicted that companies with more dispersed ownership would report non-GAAP profit figures in order to decrease the information asymmetry of smaller shareholders, this argument has generally not been supported by this study. The fact that ownership concentration was not a significant factor in the reporting decision (and that Hypothesis 2 was not supported) in the overall sample and eight of the twelve years implies that other factors took precedence over this factor. A possible explanation for this result is that some companies are not as concerned about the needs of small shareholders as they hold little power compared to large shareholders and institutional investors.

8.3.3 Leverage

Hypothesis 3 concerned leverage and argued that:

> *Highly leveraged companies are more likely to report non-GAAP profit figures than lower leveraged companies.*

Univariate results indicated that companies reporting non-GAAP profit figures were statistically significantly more highly leveraged than non-reporting companies in every year of the study. The results from multivariate logistic regression were statistically significant for the total sample and for the individual years 2006, 2008, 2009, and 2011 to 2015; eight of the twelve years of the study, and Hypothesis 3 is supported in those years.

The mean leverage for all companies in the study was the highest in 2007, the year the GFC began, and 2008, the year with the peak of the GFC in September that year. In 2008 and 2009,

the financial years containing this peak (depending on the year-end used), leverage was a statistically significant factor in the decision to report a non-GAAP profit. As the amounts of leverage were at their highest during the GFC, companies would have attempted to allay concerns shareholders may have had regarding the high amounts of leverage and the associated risk, particularly the risk of bankruptcy. Taking 2009 as an example, the number of companies reporting a higher non-GAAP profit than GAAP profit was 56 companies compared to only 13 reporting a higher GAAP profit. The greatest difference between the mean amounts of the profits in all the years of the study was also in 2009, with the mean non-GAAP profits being $182 million higher than the mean GAAP profits. This means that for most companies, the non-GAAP profit was presenting a more favourable outcome to shareholders and potential investors and could potentially allay concerns these shareholders had concerning risk and high leverage in a time of economic crises.

In the last five years of the study, 2011 to 2015, leverage was a statistically significant factor in the decision to report a non-GAAP profit. This time period covers the year of release of the ASIC Regulatory Guide 230 (2011), and all the years since. The decision to report a non-GAAP profit figure may have become more considered and deliberate over this time period due to the requirements of the ASIC guide. These results indicate that companies attempted to mitigate the higher risk associated with high leverage by voluntarily disclosing non-GAAP profit figures, with leverage being an important factor in the decision to provide this extra voluntary disclosure.

8.3.4 Good/bad News Years

Hypothesis 4 concerned the effect reporting bad news for a particular year would have on a company's choice to report non-GAAP profits and argued:

> *Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to report non-GAAP profit figures than companies reporting an increase in GAAP profits.*

Under agency theory, management provide extra information in an attempt to bond themselves to shareholders and reduce agency costs, particularly in years when the results signify bad news. Companies with bad news to report are more likely to report a non-GAAP

profit figure, particularly if the bad news result was caused by extraordinary, one-off items, in order to avoid higher monitoring costs (Bhattacharya et al. 2004; Entwistle, Feltham & Mbagwu 2004; Isidro & Marques 2015; Johnson & Schwartz 2005; Lougee & Marquardt 2004). The results of this study provide some support for this hypothesis with a statistically significant result in the predicted direction for the total sample and in the individual years 2009, 2011, 2012 and 2013. These particular years were amongst those with the highest percentage of bad news firms across the sample. The year 2009 had the highest percentage of bad news firms at 59% of the sample companies. In 2010, only 23% of the sample were bad news firms. This increased to 44% in 2011 and 51% in 2012. Therefore, in years where there were more companies with bad news to report, the variable became a statistically significant factor in the decision to report a non-GAAP profit.

The GFC occurred from mid-2007 to 2009 with the peak of the crisis around September 2008 (Reserve Bank of Australia 2010; Sinnewe, Harrison & Wijeweera 2017). The results of the logistic regression for the good/bad news variable for these three years were 2007: $p = 0.076$, 2008: $p = 0.054$ and 2009: $p = 0.001$. Therefore, during 2009, the last year affected by the crisis, having to report a decrease in GAAP profits, or a GAAP loss, was a statistically significant factor in the decision to report a non-GAAP figure. Although conditions improved during the course of 2009, the ongoing effect of the GFC would have culminated in this year, particularly for companies with a year-end of 30 June. For these companies the 2009 reports covered the peak crisis period of September 2008. Agency theory predicts that agents will attempt to provide extra information to show they are working for the benefit of the principals (Fama 1980; Jensen & Meckling 1976), particularly in times of economic downturn when outside influences are beyond the control of management. As discussed in Section 8.2.5, 2009 saw the largest majority of companies reporting a non-GAAP figure higher than the GAAP figure and the greatest difference between the mean amount of the non-GAAP figures and GAAP figures, indicating management were attempting to present non-GAAP results which were perhaps more indicative of ongoing performance.

The years 2011 to 2013 represent the release year of the ASIC Regulatory Guide and the two years immediately following its release. Having a bad news year significantly affected the decision to release a non-GAAP profit in these years. This may be due to companies

focussing more on the reasons for reporting non-GAAP profits after the release of the Guide and deciding more explanation was required if they had incurred a bad news year. However, this factor was not significant in 2014 or 2015, indicating that the initial effect of the Guide's release may have waned, and other factors became more important in the decision to report a non-GAAP profit in these years.

8.3.5 Summary Research Question 1

In summary, Research Question 1 concerned the influence size, ownership concentration, leverage and good/bad news years have on the decision to report non-GAAP profit figures. Taking the total sample as a whole, size, leverage and good/bad news years were found to be statistically significant variables affecting the decision to report non-GAAP profit figures. This finding supports the arguments put forward using agency theory about companies which are more likely to provide extra information in the form of non-GAAP profits to mitigate the effect of information asymmetry. Ownership concentration was not found to be a statistically significant factor for the total sample. The results on a year-by-year basis indicated that events surrounding certain periods in time do affect the influence of some of these variables.

8.4 Research Question 2 – Influence of Specific Events on Non-GAAP Reporting

Research Question 2 concerned the influence particular specific events may have had on the decision to report a non-GAAP profit figure. The influence the four specific events had on the decision to report a non-GAAP profit are discussed below.

8.4.1 Introduction of IFRS

Hypothesis 5 concerned the first of the specific events, the introduction of IFRS in Australia, and predicted:

> *The number of companies reporting non-GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.*

Agency theory suggests that there will be increased voluntary disclosure in times of high information asymmetry as managers attempt to bond with shareholders (Fama 1980; Jensen & Meckling 1976). The years surrounding the introduction of IFRS was such a time, with the adoption of the standards expected to result in changes to accounting policies that have significant impacts on the reported financial position and performance of companies (Australian Accounting Standards Board 2004b, p. 6). Management knew about the significant effects the introduction of the standards would have on the reported net profit before shareholders and investors (Wang & Welker 2011) and this would have been incentive for managers to provide extra disclosure concerning these effects (Gallery, Cooper & Sweeting 2008) with companies choosing to adopt different ways of expressing earnings and profits (Deloitte 2009).

While this may have been the case for some companies there was not a statistically significant increase in the number of companies reporting non-GAAP profit figures during these years (Section 6.6.2). Overall, the number of companies reporting non-GAAP profits increased from 50 in 2004 to 53 in 2005 and then to 57 in 2006. However, this overall increase in numbers does not represent the actual change in individual company behaviour during these years. The results from McNemar's tests showed that several companies changed their behaviour in each direction with some beginning to report a non-GAAP figure and others ceasing to report such a figure. For example, in 2005 companies were required to provide disclosures concerning the effect of IFRS adoption under AASB 1047 *Disclosing the Impacts of Adopting Australian Equivalents to International Financial Reporting Standards* (Australian Accounting Standards Board 2004b). During this year 13 companies began reporting a non-GAAP profit that did not do so in 2004 and 10 companies ceased to report one. With additional disclosure already being provided under AASB 1047, management of some companies may not have thought extra incremental information in the form of non-GAAP profits was warranted or even that such information may cause extra confusion. However, others clearly thought that some additional profit information was warranted in this transition to IFRS year. In 2006, the first full year of IFRS adoption, 15 companies reported a non-GAAP figure that did not do so in 2005. At the same time 11 companies that had reported a figure in 2005 ceased to do so in 2006.

Overall, the results do not support the hypothesis and instead infer that individual companies approached the decision to report non-GAAP profit figures differently, depending on how the introduction of the standards affected the financial results of the company in question.

8.4.2 Global Financial Crisis

Hypothesis 6 concerned the second of the specific events, the effect of the GFC and predicted:

> *The number of companies reporting non-GAAP profit figures will increase during the Global Financial Crisis.*

Previous literature has argued that the increase in the reporting of non-GAAP profit figures over the past two decades is due to the demand for more value-relevant information, especially during times when the value relevance of GAAP is low and extra information is needed to mitigate information asymmetry (Bowen, Davis & Matsumoto 2005; Entwistle, Feltham & Mbagwu 2010; Lougee & Marquardt 2004). Non-GAAP figures could potentially provide incremental value relevant information during times of economic crises due to the increased volatility of markets and asset prices used in fair value accounting (Malone, Tarca & Wee 2016; Sinnewe, Harrison & Wijeweera 2017). Under agency theory, this would also be a time when managers would want to report the firm's underlying economic circumstances as accurately as possible to keep shareholders informed, reduce monitoring costs and avoid damage to the manager's reputation. It was therefore predicted that the GFC would see an increase in the number of companies reporting non-GAAP profit figures.

The results in this study support the hypothesis and the contention that the reporting of non-GAAP profit figures would increase during the GFC. There was an upward trend in reporting behaviour between 2007 and 2008, with 11 companies beginning to report a non-GAAP figure in 2008 that had not done so in 2007 and only four ceasing to do so (Section 6.6.3). There was a statistically significant upward trend in reporting behaviour between 2007 and 2009 ($p < 0.01$) with 17 companies reporting a figure in 2009 that had not done so in 2007 and only five companies ceasing to report one. This finding is consistent with a previous Australian study by Malone, Tarca and Wee (2016) who found that the reporting of non-GAAP figures was more likely during the GFC, arguing that companies may have reported a

non-GAAP figure due to the many asset write-downs that were not expected to recur in the future.

8.4.3 Release of AICD and FINSIA Guidelines on Underlying Profit

Hypothesis 7 concerned the third of the specific events, the release in March 2009 of the AICD and FINSIA guidelines on reporting non-GAAP profits and predicted:

> *The number of companies reporting non-GAAP profit figures will increase after the release of guidelines on reporting underlying profits by AICD and FINSIA.*

This prediction was based Principle 1 of the Guidelines, which encouraged companies to report on the 'underlying' profit as well as statutory profit as a way of overcoming information asymmetry between managers and investors and other stakeholders (AICD & FINSIA 2009, p. 15). There was a trend towards more companies reporting non-GAAP profits than ceasing to report them between the years studied for this event (Section 6.6.4). For example, between 2008 and 2010, thirteen companies began reporting non-GAAP profits with only six companies ceasing to do so. However, the results were not statistically significant, and the hypothesis was not supported. The results for Hypothesis 6 concerning the effect of the GFC showed that the number of companies reporting non-GAAP profits did significantly increase during this period and this may have affected the results for Hypothesis 7 with the guidelines being released as the recovery from the GFC was beginning.

8.4.4 Release of ASIC Regulatory Guide 230

Hypothesis 8 concerned the fourth and last of the specific events, the release in December 2011 of the ASIC Regulatory Guide 230, *Disclosing non-IFRS financial information* and an accompanying Regulation Impact Statement and predicted:

> *The number of companies reporting non-GAAP profit figures will not be influenced by the release of Regulatory Guide 230 by ASIC.*

The Regulatory Guide 230 acknowledged that non-GAAP financial information can be useful in some circumstances and did not seek to prohibit its use (ASIC 2011). However, it did attempt to regulate the manner in which the figures are reported, similar to Regulation G in

the US. As the guide neither prohibits or encourages the use of non-GAAP figures it was predicted that its release would not affect the decision of companies to report such figures. The results for the years surrounding the release of the guide all showed no statistically significant change in reporting behaviour in any one direction and Hypothesis 8 (which predicted no change) is supported (Section 6.6.5). While there were changes in reporting behaviour, these changes were not significantly in the same direction across the sample. For example, in 2011, nine companies reported a non-GAAP profit that did not do so in 2010 and eight companies ceased to report a non-GAAP profit. This result suggests that while companies may have adjusted the way they reported non-GAAP profits to meet the requirements of the Regulatory Guide; the guide itself did not significantly affect the decision to report such a figure in one particular direction.

This result is similar to the findings of Rainsbury (2016) in the New Zealand context, who found that a Guidance Note on non-GAAP earnings from the New Zealand Financial Markets Authority had little effect on the number of companies reporting such a figure. However, these findings and those in the current study differ from the reaction in the US after the introduction of Regulation G in 2003. The introduction of the US regulation led to an immediate significant decrease in the use of non-GAAP figures, particularly in press releases (Entwistle, Feltham & Mbagwu 2006a; Marques 2006). The reasons postulated for this decline in the US included a reduction in the opportunistic use of such figures, especially as the new regulation required reconciliation to GAAP figures which made manipulation of non-GAAP figures more transparent (Entwistle, Feltham & Mbagwu 2006a; Jennings & Marques 2011; Marques 2006; Yi 2012; Zhang & Zheng 2011) and the bad press the use of non-GAAP figures had received leading up to, and at the time of regulation (Kolev, Marquardt & McVay 2008; Marques 2006). It is possible that in the Australian context, the AICD and FINSIA guidelines, released two and a half years earlier than the ASIC Regulatory Guide, may have already prompted companies to improve the manner in which they presented non-GAAP figures and made them less concerned about the negative implications the practice may have had.

More recent studies from the US have investigated beyond the initial post-Regulation G period and have found that the significant decline in the disclosure of non-GAAP figures after

regulation was only temporary (Black et al. 2012; Brown et al. 2012). By the end of 2006, the frequency of non-GAAP earnings disclosures in quarterly press releases exceeded the pre-Regulation G period (Black et al. 2012). The results from the current study showed that the ASIC Regulatory Guide 230 has not discouraged the reporting of non-GAAP profit figures with there being a statistically significant increase in their use between 2012 (the first reporting year after the release of the guide) compared to 2014 and 2012 compared to 2015. The effect the Regulatory Guide had on the manner in which these figures are presented is investigated in Research Question 4.

8.4.5 Summary Research Question 2

In summary, Research Question 2 considered four specific events (the introduction of IFRS, the GFC, the release of the AICD and FINSIA guidelines and the release of the ASIC Regulatory Guide 230) to find if any had an influence on the decision to report a non-GAAP profit figure. The results showed that the introduction of IFRS and the release of the AICD and FINSIA guidelines did not have a statistically significant effect on the decision to report non-GAAP profits. However, the GFC was statistically significant in its effect. As predicted, the release of the ASIC Regulatory Guide 230 did not affect the decision to report a non-GAAP profit figure with no significant change in behaviour surrounding its release. In the years since its release however, the increase in the number of companies reporting these figures has become statistically significant (comparing 2012 to 2014, and 2012 to 2015), showing that the trend in reporting non-GAAP if ever increasing. The addition of impression management in the next two research question provides another dimension to the findings.

8.5 Research Question 3 – Influence of Company Characteristics on the use of Impression Management

Agency theory predicts that although monitoring and bonding costs may help overcome information asymmetry between management and shareholders, an optimum amount of monitoring and bonding will be reached leaving some residual agency costs, as costs will only be incurred until marginal costs equal marginal benefits (Fama & Jensen 1983a; Jensen 1983; Jensen & Meckling 1976). These remaining costs, known as the residual loss, represent the opportunistic behaviour not eliminated by monitoring and bonding. Under the conceptual

model in this study (Figure 4.1), the use of impression management tactics to emphasise non-GAAP profit figures is one form of opportunistic behaviour used by management that shareholders and potential investors may be unable to decipher due to the effect of any residual loss. The remaining two research questions (Research Questions 3 and 4) investigated the influence company characteristics and specific events may have on the use of impression management when reporting non-GAAP profit figures.

The disclosure of a non-GAAP figure does not, of itself, constitute impression management. Rather it is how the non-GAAP figure is presented to the shareholders and potential investors through the use of prominence and emphasis as compared to the GAAP result that constitutes impression management in this study. As shareholders and potential investors generally focus on earnings, any reported earnings figures 'constitute the most worthwhile information to manipulate in corporate narrative sections' (Merkl-Davies & Brennan 2007, p. 158) with non-GAAP profit figures often 'strategically emphasised by managers in order to influence the perception of the firm's financial results' (Marques 2010, p. 131).

The analysis for the remaining two research questions involved the measurement of a relative emphasis score for impression management calculated by subtracting the impression management score for GAAP profit figures from the impression management score for non-GAAP profit figures. A positive result meant that the non-GAAP figure was emphasised over the GAAP figure while a negative score meant the GAAP figure was emphasised. Research Question 3 concerned the influence specific firm characteristics may have on the use of impression management tactics when reporting non-GAAP profit figures. The four specific firm characteristics investigated are discussed below.

8.5.1 Size

Hypothesis 9 concerned the first firm characteristic, size, and predicted:

> *Larger companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than smaller companies.*

Arguments using agency theory suggest that larger companies are more complex than smaller companies and size can exacerbate agency problems and information asymmetry (Fama & Jensen 1983b; Jensen & Meckling 1976; Meek, Roberts & Gray 1995). Agency costs are increased, and it is more likely that monitoring and bonding costs will not completely eliminate opportunistic behaviour and a residual loss will remain. Larger companies were therefore predicted to be more likely to use impression management tactics in order to influence shareholders and investors.

Limited support for this hypothesis was found in the press release in 2007. In this instance, larger companies were found to be statistically significantly more likely to use impression management tactics when presenting non-GAAP profits than smaller companies. The variable was also statistically significant in the press release for the total sample (all years together), and in 2009 in both documents and the total of both documents, but not in the predicted direction. Smaller companies were therefore more likely to use impression management tactics for the total sample (in the press release) and during 2009. The GFC may have had some influence on the result in 2009 with smaller companies less able to weather the effects of the GFC and keen to highlight any positive information to shareholders in the form of a higher non-GAAP profit figure.

8.5.2 Ownership Concentration

Hypothesis 10 concerned the second firm characteristic, ownership concentration, and its influence on the use of impression management tactics and predicted:

> *Companies with dispersed ownership are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies with concentrated ownership.*

Larger shareholders, including institutional investors, are usually more experienced or 'sophisticated' and have more incentive and power to monitor and influence management. Smaller shareholders, on the other hand, 'lack the necessary sophistication and experience to understand fully the precision and reliability of their information set' (Young 2014, p. 453), are less able to verify agents are acting in their interests (Abrahamson & Park 1994; Eisenhardt 1989) and may be unable to decipher information presented to them. Shareholders'

perceptions of the usefulness, relevance and reliability of non-GAAP figures, and their reaction to the figures, depends on their level of sophistication (Allee et al. 2007; Bhattacharya et al. 2007; Frederickson & Miller 2004; James & Michello 2010) and the effect these figures have on less sophisticated investors increases with the prominence given to the non-GAAP profit figure as compared to the GAAP result (Allee et al. 2007; Elliott 2006). It was predicted that companies with more dispersed ownership may take advantage of these less sophisticated investors by using impression management tactics when presenting non-GAAP profit figures.

However, the results lend little support to the proposition. Ownership concentration was statistically significant and in the predicted direction in the total of both documents for the total sample and in the press release in 2007. It was statistically significant but not in the predicted direction in the press release and the total of both documents in 2010, and in the annual report in 2015. The positive result for the total sample indicates that dispersed ownership has some influence on the overall use of impression management tactics when the years are considered in total.

8.5.3 Leverage

Hypothesis 11 concerned the third firm characteristic, the influence of leverage, and predicted:

> *Highly leveraged companies are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than lower leveraged companies.*

It was argued that shareholders may perceive a higher risk in more highly leveraged firms and feel more vulnerable due to creditor's claims over profits. Companies may attempt to allay these concerns by emphasising non-GAAP profit figures, particularly where the figure exceeds the GAAP result. Management may behave opportunistically when reporting non-GAAP profits, particularly if the company is not subject to debt covenants or if existing covenants have not been violated. Christensen et al. (2017) found a significant decrease in the disclosure of non-GAAP profit figures and an increase in their 'quality' following debt covenant violations.

This hypothesis was supported for the total sample in the press release, and in 2009 and 2010, the final year of the GFC and the year immediately following the crisis. These findings indicate that highly leveraged companies were using impression management to highlight non-GAAP profits in the latter part of, and immediately following, the GFC when concerns about the risk of high levels of debt may have been escalated.

8.5.4 Good/bad News Years

Hypothesis 12 concerned the last firm characteristic, influence a bad news year may have on the use of impression management, and predicted:

> *Companies reporting a decrease in GAAP profits from the previous period, or a GAAP loss, are more likely to use impression management tactics when reporting non-GAAP compared to GAAP profit figures than companies reporting an increase in GAAP profits.*

As the reputation of management may suffer during periods of decreased earnings and compensation packages are often based on performance (Davidson et al. 2004), there is incentive to use impression management to disguise bad news. Previous studies have found that companies reporting bad news emphasise non-GAAP profit figures (Bowen, Davis & Matsumoto 2005; Guillamon-Saorin, Garcia Osma & Jones 2012). This prediction was supported in this study for the total sample in both the press release and total relative emphasis indicating that having a bad news year generally affects the use of impression management to emphasise non-GAAP profit figures compared to GAAP. On a year-by-year basis however, the hypothesis was not supported by the results of this study, with only the total relative emphasis in 2012 being significant and in the predicted direction.

8.5.5 Summary Research Question 3

Research Question 3 concerned the influence size, ownership concentration, leverage and good/bad news years may have on the use of impression management tactics when reporting non-GAAP profit figures. Several models involved in the analysis of this question were not significant. For the total sample, leverage and good/bad news year were significant in the predicted direction in the press release, and ownership concentration and good/bad news year were significant in the predicted direction for the total of the two documents. These results

highlight the importance of the press release as a timely, unaudited disclosure tool for the use of impression management. Previous studies concerning non-GAAP profits and impression management have not investigated the influence of ownership concentration or leverage, so the results of this study provide new insights into these variables and their effect. The results concerning bad news years support previous findings that reporting bad news influences the use of impression management tactics (Bowen, Davis & Matsumoto 2005; Guillamon-Saorin, Garcia Osma & Jones 2012). The possibility that specific events may have influenced the use of impression management tactics is discussed in Research Question 4.

8.6 Research Question 4 – Influence of Specific Events on the use of Impression management

Research Question 4 concerned the influence specific events may have on the use of impression management tactics when reporting a non-GAAP profit figure. Two of the events in question (the introduction of IFRS and the GFC) would have led to an increase in information asymmetry which was not fully eliminated by monitoring and bonding activities. The resulting residual loss provides an avenue for opportunistic behaviour on the part of management in the form of impression management. The other two events (release of the AICD and FINSIA guidelines and the ASIC Regulatory Guide) highlighted the issue of non-GAAP profit reporting and the importance of the figures not being misleading. These events should have decreased the ability of management to use impression management techniques opportunistically.

Figure 7.1 in Chapter 7 gave some initial insight into the impression management behaviour surrounding the events under investigation through an examination of the mean relative emphasis scores for the press release, annual report and the total of both documents. With the introduction of IFRS, there was a sharp decrease in the mean relative scores indicating a trend towards emphasising GAAP over non-GAAP in the transition year (2005) and then the reverse trend towards emphasising non-GAAP over GAAP in the adoption year. In 2007 there was another downward trend in the mean relative emphasis scores, perhaps as the adoption of IFRS had already taken place. However, in 2008, there was a sharp increase in mean relative emphasis scores indicating a trend towards emphasising non-GAAP over GAAP as the GFC took effect.

There was another downward trend between 2008 and 2009 due to either the improving economic conditions or the release of the AICD and FINSIA guidelines on reporting non-GAAP profits or a combination of the two. This trend continued in 2010 (except in the annual report) and then from 2011 onward until 2014. This sharp decrease from 2010 onward showed the influence that the release of the ASIC Regulatory Guide had on the practice of emphasising non-GAAP profits over GAAP profits, with the mean relative emphasis score for the press release and the total score in the years 2012 to 2014 dropping below the zero mark. This indicates that the GAAP figure was emphasised over the non-GAAP figure. Note however, that this trend reversed in 2015 when once again the mean relative emphasis scores were greater than zero indicating that on average companies emphasised the non-GAAP figure over the GAAP in this year. A more in-depth analysis of the influence the specific four events investigated had on the decision to report a non-GAAP profit are discussed below.

8.6.1 Introduction of IFRS

Hypothesis 13 concerned the introduction of IFRS in Australia effective for annual reporting periods commencing on or after 1 January 2005. As management would have known about the effect the introduction of the standards would have on the GAAP profit before shareholders and investors, it was predicted that managers may exploit this exogenously imposed information asymmetry to their advantage (Wang & Welker 2011) and not only have reported a non-GAAP profit figure but may have given it undue prominence over GAAP. The hypothesis predicted:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase with the introduction of International Financial Reporting Standards in Australia.*

The analysis for this hypothesis compared the year 2004 to the transition year, 2005, and also to the adoption year, 2006. It also compared 2005 to 2006. Contrary to the prediction, the mean relative emphasis score decreased in the press release, annual report and total between 2004 and 2005, with the mean annual report relative emphasis decreasing to below zero in 2005. This indicates that, on average, the GAAP figure was emphasised more than the non-GAAP figure in that year. Although these results were not statistically significant, this downward trend indicates that, in the transition year to IFRS, companies were attempting to

explain the impact the adoption of the standards would have on financial reporting. This was mandated by AASB 1047 *Disclosing the Impacts of Adopting Australian Equivalents to International Financial Reporting Standards* (Australian Accounting Standards Board 2004b), which required companies to provide certain disclosures concerning the effect of IFRS adoption. Providing these required explanations meant that companies focussed on the GAAP profit figure, which in turn may have led to this figure being repeated and emphasised more than the non-GAAP figure. This would explain the result in the annual report for 2005, which is the document where companies would have provided the most information concerning the effect of the adoption.

Between 2005 and 2006 the trend was reversed in the press release, annual report and total relative emphasis with all means indicating an emphasis of non-GAAP over GAAP profits. Although these results were not statistically significant they do indicate a trend of emphasising non-GAAP in the adoption year (2006), when most companies in the sample reported the first GAAP net profit calculated fully under IFRS. This may indicate that once the adoption of IFRS was fully implemented, some companies chose to emphasise the non-GAAP figure, which may have been adjusted for some of the less favourable impacts of IFRS adoption on the GAAP profit.

8.6.2 Global Financial Crisis

With high information asymmetry during the GFC, shareholders were concerned and potential investors wary and this presents a situation where opportunistic disclosures may have increased. Hypothesis 14 concerned this period of time and predicts:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will increase during the Global Financial Crisis.*

During economic downturns resources are scarce and there is more competition for funds from investors. This increases the motivation to engage in impression management (Merkl-Davies & Brennan 2007) and highlight more favourable non-GAAP profit figures. This hypothesis was supported between 2007 and 2008 with a statistically significant result for the press release. The mean relative emphasis in the annual report also increased although this

result was not statistically significant. This result supports the contention that press releases provide a timely vehicle in which to employ impression management tactics, being the first document that highlights performance for the year and also being voluntary and largely unregulated (Bowen, Davis & Matsumoto 2005; Brennan, Guillamon-Saorin & Pierce 2009; García Osma & Guillamón-Saorín 2011; Hitz 2010; Merkl-Davies & Brennan 2007). Press releases are also easily accessible, not only to shareholders but potential investors and other stakeholders, and are often covered by the national press (Brennan, Guillamon-Saorin & Pierce 2009; Guillamon-Saorin, Garcia Osma & Jones 2012). During the GFC, concerned shareholders would have been particularly keen to receive information on results in a timely fashion. In 2008, 70% of companies reporting a non-GAAP profit figure reported a figure higher than the GAAP figure, and given the concern over the economic downtown, these companies would be motivated to emphasise the higher result and allay fears of shareholders.

For companies with a year end of 30 June, the financial year 2009 contained the peak of the GFC (September 2008). Between 2007 and 2009 the mean relative emphasis increased in the press release and total but, unlike between 2007 and 2008, not to a statistically significant level. This indicates that companies used impression management tactics to emphasise the non-GAAP figure to the greatest extent in 2008. Between 2008 and 2009 the relative emphasis score decreased across both documents and the total. Therefore, although the peak of the crisis was in the 2009 financial year, the recovery from the crisis (during 2009) may have been enough for companies to lessen the emphasis of the non-GAAP figure.

8.6.3 Release of AICD and FINSIA Guidelines on Underlying Profit

Principle one of the AICD and FINSIA guidelines on reporting non-GAAP profits, released in March 2009, recommends that the reporting of these figures should be done 'without giving undue prominence to the underlying profit figure' (AICD & FINSIA 2009, p. 15). Hypothesis 15 concerned the release of these guidelines and predicted:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of guidelines on reporting underlying profits by AICD and FINSIA.*

Although the results for this hypothesis were not statistically significant and the hypothesis therefore was not supported, the mean relative emphasis scores did decrease over this time period. It is unclear if this decrease in relative emphasis between 2008 and 2009 was due to the release of these guidelines or the fact that many companies were recovering from the GFC and management may no longer have seen the need to over emphasise the non-GAAP profit figures. For some individual companies the change in behaviour was explained by management in the press release and annual report as attempting to comply with the guidelines. For example, Stockland Stapled went from a relative emphasis score of 11 (indicating a high emphasis on non-GAAP) in 2008 to a score of 3 in 2009. In both their press release and annual report, they state '(u)nderlying profit reflects statutory profit as adjusted to reflect the Directors' assessment of the result for the ongoing business activities of Stockland, in accordance with the AICD / Finsia principles for reporting underlying profit' (Stockland Corporaton Ltd 2009a, p. 1; 2009b, p. 17). Although companies also showed a marked decrease in relative emphasis of non-GAAP profit figures, e.g. Caltex went from 17.5 in 2008 to 2.5 in 2009, Oz Minerals went from 6.5 in 2008 to -10 in 2009, it is unclear as to whether these results were due to the guidelines or the recovery from the GFC.

Although the guidelines were released by professional bodies and espoused best practice, they were not mandatory, and the results suggest that some companies, particularly banks, were not following the guidelines. For example, the relative emphasis score for the Bank of Queensland increased from 15 in 2008 to 19 in 2009, both scores showing a high emphasis on non-GAAP. Similarly, Bendigo Bank increased from -12 in 2008 (indicating an emphasis on GAAP profit) to 6.5 in 2009 (indicating an emphasis on non-GAAP profit). This raises questions about the effectiveness of guidelines from professional bodies and the willingness of members of the bodies to comply, as opposed to guides issued by regulators. It may also indicate that other factors, such as the GFC, had a more overriding influence on the behaviour of companies.

8.6.4 Release of ASIC Regulatory Guide 230

The release of ASIC Regulatory Guide 230, *Disclosing non-IFRS financial information* and an accompanying Regulation Impact Statement in December 2011 attempted to regulate the

manner in which non-GAAP profits were reported and required GAAP profits to be given equal or greater prominence (ASIC 2011). The release of this guide suggests that ASIC considers the use of emphasis to be a disclosure tactic that could be misleading and needed to be addressed. Hypothesis 16 predicted:

> *The use of impression management tactics by companies when reporting non-GAAP compared to GAAP profit figures will decrease with the release of Regulatory Guide 230 by ASIC.*

The results indicate that in the year of the Regulatory Guide's release, and the year following its release, the relative emphasis in the press release, annual report and the total decreased indicating a move away from emphasising the non-GAAP figures towards emphasising the GAAP figures. There was a statistically significant decrease in the press release between 2010 and 2012 supporting the hypothesis and signifying that the initial release of the Regulatory Guide had a substantial effect on behaviour. In 2012 the relative emphasis in both the press release and total became negative, indicating an emphasis on GAAP, and remained negative until 2015. Although not a statistically significant change, the results in 2015 indicate that the effect of the Regulatory Guide on behaviour appears to be decreasing. These results correlate with results from studies in the US following the release of Regulation G which also required non-GAAP figures not be given prominence over GAAP figures. Studies in the US found a move towards companies giving both figures equal prominence in press releases (Entwistle, Feltham & Mbagwu 2006a, 2006b; Heflin & Hsu 2008; Marques 2010).

Although the results indicate that the ASIC Regulatory Guide has had a significant effect of reporting behaviour, particularly in the press release, this is not always the case on an individual company basis. In 2015, four years after the introduction of the Guide, 44 of the 86 companies in the sample that reported a non-GAAP profit figure, had a total relative emphasis score greater than zero. This indicates the non-GAAP profit figure was emphasised more than the GAAP profit figure. One particularly concerning example is the 2015 press release (four years after the release of the Regulatory Guide) of Northern Star Resources Ltd reproduced as Figure 8.1. This press release not only emphasises the non-GAAP profit of $108.9 million (beginning with a large headline "UNDERLYING NPAT SOARS 198% TO A$108.9M") but does not even report the GAAP profit of $91.9 million. The press release does not explain how the underlying figure is calculated and provides no reconciliation to GAAP. Although

Figure 8.1: 2015 Press Release of Northern Star Resources Ltd

NORTHERN STAR
RESOURCES LIMITED

ASX ANNOUNCEMENT
27 August 2015

Australian Securities
Exchange Code: **NST**

Board of Directors
Mr Chris Rowe
Non-Executive Chairman

Mr Bill Beament
Managing Director

Mr Peter O'Connor
Non-Executive Director

Mr John Fitzgerald
Non-Executive Director

Ms Liza Carpene
Company Secretary

Issued Capital
Shares 600 million
Options 4.3 million
Current Share Price A$1.91
Market Capitalisation
A$1.15 billion
Cash and Cash Equivalents
30 June 2015 - A$183 million

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FINANCIAL RESULTS FOR THE YEAR TO 30 JUNE 2015

UNDERLYING NPAT SOARS 198% TO A$108.9M

Return on equity of 32%; FY15 dividend up 43% to 5¢ fully franked

KEY POINTS

- **Northern Star caps a year of significant growth with a 198% increase in underlying net profit after tax to A$108.9 million for FY15**
- **Revenue up 185% to A$845.7m; Underlying Company free cash flow up 315% to A$185.6m**
- **Underlying EBITDA up 220% to A$333.1m**
- **Final dividend increased to 3.0¢ from 2.5¢ previously; Full-year payout up 43% from 3.5¢ to 5¢; Earnings per share up from 4.5¢ to 15.5¢**
- **Cash and equivalents increased to A$178m from A$96m a year ago, even after purchasing the Jundee Gold Mine for A$82.5m, paying A$26.5m in dividends and investing A$50m in exploration; No bank debt**
- **Return on equity of 32%, demonstrating that growth has not diminished Shareholder returns**
- **Results reflect increase in gold sold to 580,748oz from 210,055oz; All-in sustaining cost of A$1,065/oz (A$1,094/oz previously)**
- **Total Resources in FY15 increased by 44% to 8.9Moz; Measured and Indicated Resources increase by 42% to 4.4Moz, underpinning significant growth in mine lives with eight new discoveries also made**
- **Total Reserves up 26% to 1.5Moz (all revised estimates are after mining 622,000oz in FY15)**
- **2.7Moz added to the Resource base at a discovery cost of A$19/oz**
- **Northern Star will be hosting a conference call on its FY15 results today at 9am AEST (7am AWST). The call can be accessed at http://www.brrmedia.com/event/140152**

Northern Star Resources Limited (ASX: NST) has capped a year of significant growth with a 198% increase in underlying net profit after tax to A$108.9 million for the 12 months to 30 June 2015.

The performance has culminated in Northern Star increasing its final dividend to 3¢ a share, fully-franked, from 2.5¢ previously. This takes the total payout for the year to 5¢ a share, fully-franked, an increase of 43% on FY14. The dividend will be declared to all Shareholders on the register at 14 September 2015 (EX date 10 September 2015) and is expected to be paid on 2 October 2015.

The results reflect the benefits of the acquisitions made by Northern Star during the past 18 months. The Jundee Gold Mine was transferred to Northern Star on 1 July 2014 while the Plutonic mine became part of Northern Star in February 2014, and Kundana and Kanowna Belle in March 2014.

These acquisitions underpinned a 176% increase in total gold sold in FY15 to 580,784oz at an all-in sustaining cost (AISC) of A$1,065/oz.

However, the acquisition led growth did not diminish Shareholder returns, with the Company's return on equity totalling 32%.

ASX ANNOUNCEMENT – 27 AUGUST 2015

NORTHERN STAR RESOURCES LIMITED

Underlying Company free cash flow was A$185.6 million, up 315%, underlying EBITDA was A$333.1 million, up 220% and earnings per share rose from 4.5¢ to 15.5¢.

Northern Star ended the year with no bank debt, cash and cash equivalents of A$178 million, up from A$96 million a year earlier, even after purchasing the Jundee Gold Mine for A$82.5 million, paying A$26.5m in dividends and investing A$50m in exploration over FY15.

Northern Star Managing Director Bill Beament said the Company had enjoyed outstanding success on every level during the year and was ideally positioned for further growth.

"Our acquisitions have delivered exceptional results at the profit, production and return on equity levels," Mr Beament said. "They are now also generating strong exploration results, with substantial growth in Resources and Reserves which will underpin increases in mine lives.

"We completed three major acquisitions over the past 18 months, repaid all the debt used to fund them, invested A$50 million in exploration and increased the year's dividend payout by 43%.

"At the same time, we have adopted a prudent and cautious approach to capital management, keeping and building upon a healthy cash balance that is appropriate for a company of our size.

"This reflects our philosophy of increasing the dividend payout to a level that is both meaningful and sustainable while maintaining a balance sheet that can withstand the increased level of volatility we are currently seeing in commodity markets and also provide the firepower to make opportunist acquisitions without creating financial duress."

Mr Beament said the decision to invest A$50 million in exploration at and around the Company's gold mines had paid huge dividends. A series of strong drilling results, including eight discoveries in 12 months and significant extensions of known mineralisation, culminated recently in a 2.7 million-ounce increase in Resources to 8.9Moz. This increase came after mining 622,000oz for the year and at a discovery cost of just A$19/oz.

Measured and Indicated Resources increased 42%to 4.4Moz, pointing to significant increases in mine lives.

In light of this success, Northern Star intends to re-invest A$74 million this financial year on both; targeted drilling campaigns to progress the recent exploration successes and on expansion/investing capital to potentially bring a further 1.5Moz into future mine plans.

This substantial investment is central to the Company's strategy for growing mine lives and production and will continue to see Northern Star generate superior levels of returns on invested capital for its Shareholders.

The A$74 million investment is expected to see the Company's production profile rise next financial year from the 535,000-570,000oz level forecast for the current financial year. Northern star intends to provide further guidance on this outlook over the coming year.

"Northern Star now has total flexibility and a host of options," Mr Beament said. "We can implement prudent capital allocation while retaining our status as a growth stock on the back of exploration and development as well as the potential for further strategic acquisitions."

Yours faithfully

BILL BEAMENT
Managing Director
Northern Star Resources Limited

not as extreme, there are other examples of companies not following the Regulatory Guide. The 2015 press release of Ardent Leisure, for example, also did not mention the GAAP profit choosing to only report and emphasise the non-GAAP figure.

ASIC listed non-IFRS (non-GAAP) profit information as an area of focus in their reviews of financial reports for 2012, 2013 and 2014 (Section 3.3.2). However, from 2015 to 2017 there was no mention of non-IFRS information in the documents concerning areas of focus (ASIC 2015a, 2015b, 2016a, 2016b, 2017a, 2017b, 2017c). This may have led companies to become more strategic in their compliance with the Regulatory Guide. For the Regulatory Guide to be an effective tool in the regulation framework it is imperative that ASIC maintain vigilance in both informing companies of the guidelines and enforcing compliance with them.

8.6.5 Additional Analysis on RQ4

The discussion for Research Question 4 above concerned the results obtained from comparing the relative emphasis scores. These scores are the result of subtracting the total GAAP impression management score for emphasis from the total non-GAAP impression management score for emphasis. The purpose of using relative emphasis scores was to determine if the GAAP profit figure was being given equal or greater prominence than the non-GAAP. Companies emphasising the non-GAAP figure compared to the GAAP figure may be using impression management tactics to mislead shareholders and investors. The results showed, as predicted, a significant increase in emphasis towards non-GAAP during the GFC and a significant decrease in emphasis away from non-GAAP after the release of the ASIC Regulatory Guide. However, these results give no indication of the reporting behaviour of companies with regards to emphasis for each type of figure, non-GAAP and GAAP. Changes in the mean relative emphasis score, such as the increase during the GFC and the decrease with the release of the Regulatory Guide from ASIC, may be due to a change in emphasis of the non-GAAP figure, the GAAP figure, or both. Further analysis was undertaken to determine patterns in the mean impression management scores for each type of figure to help explain the behaviour of companies concerning emphasis over the twelve years of the study.

The results using relative emphasis for the years surrounding the introduction of IFRS in Australia were not statistically significant (Section 7.4.2). However, there was a downward trend during the transition year (2005) to almost equal emphasis between the figures and an

upward trend in the adoption year (2006) indicating an emphasis of non-GAAP over GAAP profits. Examining the impression management scores for the non-GAAP and GAAP figures individually, the emphasis placed on non-GAAP figures increased during these years with the increase being significant for the annual report and the total between 2005 and 2006 and for the press release and the total between 2004 and 2006. The emphasis on GAAP figures also increased during these years, with the increase being significant for the press release between 2004 and 2005 and 2004 and 2006. Therefore, while there was a downward trend in relative emphasis between 2004 and 2005, this was not due to a decrease in emphasis on non-GAAP profits but rather to an increase in emphasis on GAAP profits. Companies were still reporting non-GAAP figures with greater emphasis than in the past but were also reporting the GAAP figures with greater emphasis. This demonstrates an attempt on the part of companies to report and explain the profits calculated under the new regime but at the same time to continue to report and emphasise non-GAAP profits.

Between 2007 and 2008, as the GFC took effect, there was a significant increase in relative emphasis in the press release, meaning that the non-GAAP figure was emphasised over the GAAP figure (Section 7.4.3). Despite this, there were no significant changes in the emphasis on non-GAAP figures during this time and the change in relative emphasis was due to a significant decrease in emphasis of the GAAP figure between 2007 and 2008. Therefore, companies decreased their emphasis on GAAP figures during the time of economic crisis rather than increasing the emphasis on non-GAAP.

The release of the ASIC Regulatory Guide saw a significant decrease in the relative emphasis in press releases between 2010 and 2012 (Section 7.4.5). As the Regulatory Guide sought to change the behaviour of companies where the reporting of non-GAAP profit figures was concerned it could be assumed that this decrease in relative emphasis was due to a decrease in the emphasis on the non-GAAP profit figures. However, this was not the case, with the emphasis on non-GAAP figures actually increasing in the annual report and total of the two documents and decreasing only slightly in the press release over the years surrounding the release of the guide. Companies did not change their behaviour with regard to reporting and emphasising non-GAAP profits. Instead they increased their emphasis on the GAAP profit

figures to meet the ASIC requirement of equal or greater emphasis, with this increase being significant in the total between 2010 and 2012.

This additional analysis provides extra insight into the reporting behaviour of companies showing that the use of impression management tactics relating to emphasis has been reasonably constant as far as non-GAAP figures are concerned, particularly since 2006. The significant changes in the relative emphasis score reported in the results for Research Question 4 are the result of changes in the impression management tactics used to report the GAAP figure, which has been less emphasised (during the GFC) or more emphasised (with the introduction of the ASIC Regulatory Guide) during the events under investigation.

8.6.6 Summary Research Question 4

In summary, Research Question 4 concerned the influence the introduction of IFRS, the GFC, the release of the AICD and FINSIA guidelines and the ASIC Regulatory Guide had on the use of impression management tactics when reporting a non-GAAP profit figure. The emphasis of the non-GAAP figure compared to the GAAP figure was investigated and results showed that this relative emphasis increased significantly in the press release during the GFC and decreased significantly in the press release after the release of the ASIC Regulatory Guide 230. These results showed that the press release was the prime document for the use of impression management due to its timeliness and perhaps also due to its lack of accountability through auditing. The results also indicate that while economic downturns significantly influence the emphasis of non-GAAP compared to GAAP figures, the use of impression management tactics can be mitigated by the introduction of regulation surrounding the practice. Additional analysis revealed the interesting finding that it was the emphasis or not of the GAAP figure which generally affected the overall relative emphasis scores with this figure being less emphasised during the GFC and more emphasised after the release of the ASIC Regulatory Guide.

8.7 Presence of a Reconciliation

One of the major concerns regarding the reporting of non-GAAP profit figures over the past two decades has been the lack of transparency, definition or consistent format for the figures (making comparison between companies difficult) and the possibility of manipulation of their presentation through impression management strategies which may mislead investors, particularly non-professionals (Brody & McDonald 2004; Halsey & Soybel 2002; Heitger & Ballou 2003; Marques 2010). However, studies have found that any confusion caused by the reporting of the figures may be mitigated by the presence of a clear reconciliation between the GAAP and non-GAAP figures (Elliott 2006; Marques 2010). For example, studies have found that although the presence and emphasis of non-GAAP figures affected the trading decisions of less sophisticated investors, the presence of a reconciliation to GAAP mitigated this effect (Allee et al. 2007; Elliott 2006).

Although the presence of a reconciliation between non-GAAP and GAAP profit figures does not form part of the impression management index or relative emphasis score calculated in this study, a record was kept of whether companies provided a full reconciliation in documents where the non-GAAP figure was present (see Figures 7.3 and 7.4). Principle 3 of the AICD and FINSIA guidelines on reporting underlying profits, released in March 2009, states:

> *Principle 3 – Reconcile the underlying profit figure to the statutory profit figure and present the adjustments in tabular form, with any accompanying explanation that may be necessary* (AICD & FINSIA 2009, p. 16).

This principle requires the non-GAAP profit figure to be reconciled to the GAAP profit in a table that shows each significant adjustment (impacts net profit after tax by more than 5%), both gross and net of tax, and includes explanatory notes. The reconciliation should be transparent, logical and justifiable. This principle seemed to have little effect on press releases containing non-GAAP profits issued by companies, with the percentage including a full and detailed reconciliation rising from 13% in 2008 to 17% in 2009 and 18% in 2010. An increased effect can be seen in the annual reports containing non-GAAP figures with the percentage providing a full reconciliation increasing from 38% in 2008 to 49% in 2009 and

50% in 2010. Several companies reported that they followed the guidelines when calculating and presenting the non-GAAP figures.

ASIC Regulatory Guide 230, released in December 2011, also recommends the inclusion of a reconciliation between the two profit figures stating:

> A reconciliation between the non-IFRS and IFRS financial information should be provided, separately itemising and explaining each significant adjustment. Where reconciling items are components of IFRS financial information, they should be capable of being reconciled to the financial report. Where a reconciling item cannot be extracted directly from the financial report, the reconciliation should show how the figure is calculated. Where comparative non-IFRS financial information is presented for a previous period, a reconciliation to the corresponding IFRS financial information should be provided for that previous period (ASIC 2011, p. 18).

The Regulatory Guide also requires the GAAP (IFRS) figure and a reconciliation between the two figures be located somewhere in each document that contains a non-GAAP figure (ASIC 2011, p. 20). This guideline seems to have had little effect on the press releases issued by companies with only a slight increase from 23% including a reconciliation in 2011 to 31% in 2012. The percentage then decreased to 23% in 2013. Only full, detailed reconciliations were counted in this study. Some companies briefly stated the items excluded in a sentence or provided a less detailed tabular version. For example, in Invocare's 2014 media release there was a simple statement as to what had been excluded from the non-GAAP figure with no full reconciliation or any direction as to where to find one:

Excerpt from Invocare 2014 press release

> Operating earnings after tax, which excludes asset sales, asset impairments and impacts of undelivered prepaid contracts, increased by 8.7% or $3.7 million to $46.2 million from $42.5 million.

The ASX annual report from 2012 had a table in the appendix but simply showed the difference between the GAAP and non-GAAP figures as being 'Significant Items After Income Tax'.

Excerpt from table in appendix of ASX 2012 press release

Appendix – ASX Full-Year Result to 30 June 2012

Group Profit and Loss Statement	FY12 $M	FY11 $M	Variance $M	Variance %
Operating Revenue	610.4	617.6	(7.2)	(1.2%)
Cash Operating Expenses	141.1	135.5	(5.6)	(4.1%)
EBITDA	**469.3**	**482.1**	**(12.8)**	**(2.7%)**
Depreciation and Amortisation	27.6	23.3	(4.3)	(18.5%)
EBIT	**441.7**	**458.8**	**(17.1)**	**(3.7%)**
Interest and Dividend Income	49.8	47.4	2.4	5.1%
Underlying Profit Before Income Tax	**491.5**	**506.2**	**(14.7)**	**(2.9%)**
Income Tax Expense	(145.3)	(149.6)	4.3	2.9%
Underlying Profit After Income Tax	**346.2**	**356.6**	**(10.4)**	**(2.9%)**
Significant Items After Income Tax	(7.0)	(4.3)	(2.7)	(62.8%)
Statutory Profit After Income Tax	**339.2**	**352.3**	**(13.1)**	**(3.7%)**

Several companies directed the reader to another document such as the financial report or annual report or to the company's website to find a reconciliation. This is unsatisfactory if the report containing the reconciliation is not released until sometime after the press release.

The requirement of the Regulatory Guide to provide a reconciliation had a greater effect on the annual report with full reconciliations rising from 50% in 2010 to 60% in 2011 and then to 75% in 2012. However, there are still, on average, a quarter of the companies in the sample not providing a full, detailed reconciliation in their annual report up to the end of the 2015 year and 69% of companies not providing one in their press release. This finding calls into question the incremental value-relevant information motive for reporting non-GAAP profit figures. With evidence that the non-GAAP figure can be more misleading without a reconciliation this behaviour appears to be opportunistic, particularly as the Regulatory Guide requires a reconciliation, and should be of concern to investors and regulators alike.

8.8 Summary

This chapter discussed the findings from this study into the reporting of non-GAAP profit figures in Australia. The findings indicate that the practice of reporting these figures has become entrenched in the financial reporting landscape in Australia and that although the release of the ASIC Regulatory Guide 230 has gone some way towards regulating the practice, some companies still behave opportunistically when reporting non-GAAP profits.

Company characteristics can influence a company's decision to report a non-GAAP profit, particularly size and leverage, but the significance of the characteristic is affected by the year in question. However, company characteristics had little influence on the use of impression management when reporting non-GAAP profits with only leverage having an effect in more than one year. Of the four specific events that were analysed, the GFC and the ASIC Regulatory Guide were statistically significant in affecting the decision to report a non-GAAP figure as well as in using impression management techniques. Further analysis revealed that it was the emphasis placed on the GAAP figure that changed rather than the emphasis on the non-GAAP figure. The results for Research Questions 3 and 4 highlight the importance of timeliness where the use of impression management tactics are concerned, with most of the significant results being in, or driven by, the press release. These findings reveal possible avenues for further research. This will be discussed in the next chapter which concludes this study.

Chapter 9

Conclusion

9.1 Introduction

The aim of this study was to examine the reporting of non-GAAP profit figures in Australia over an extended period, ranging from before the introduction of IFRS to after the release of the ASIC Regulatory Guide 230. Two possible motives for the practice have been suggested; the first is that management is attempting to provide incremental, value-relevant information to assist shareholders and potential investors in decision making, and the second is that management is behaving opportunistically and attempting to mislead shareholders and potential investors by managing their impression of the company's performance. This study acknowledged that these two motives may not be mutually exclusive and in the first instance investigated the decision to report a non-GAAP profit figure by Australian companies. It then examined the use by companies of impression management tactics concerning emphasis when reporting non-GAAP profit figures. Four research questions and sixteen related hypotheses were developed to investigate which company characteristics and specific events influence a company's choice to report a non-GAAP profit figure and also influence the use of impression management tactics to emphasise the figure. The research questions are:

RQ1 Is the company's choice to report non-GAAP profit figures influenced by specific firm characteristics?

RQ2 Is the company's choice to report non-GAAP profit figures influenced by specific events?

RQ3 Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific firm characteristics?

RQ4 Is the use of impression management tactics when reporting non-GAAP and GAAP profit figures influenced by specific events?

A summary of the key findings of the study is presented in Section 9.2 followed by the contributions and implications of the study in section 9.3. Limitations of the study and suggestions for future research are discussed in Sections 9.4 and 9.5 respectively.

9.2 Summary of Key Findings

This study used a final sample of 109 companies from the ASX 200 that were listed for the entire period of the study. It was evident that the reporting of non-GAAP profits has become entrenched in the financial reporting landscape in Australia. The results showed that the practice increased steadily over the twelve years of the study with 79% of the sample reporting a non-GAAP figure in 2015, up from 46% in 2004, the first year of the study. The mean non-GAAP profit figures exceeded the mean GAAP profit figures in all but two years of the study and the majority of companies reported a higher non-GAAP profit than GAAP profit in all but these same two years (2006 and 2007).

Non-GAAP profit figures may be strategically calculated and emphasised to influence perceptions of the company's performance and may mislead shareholders and prospective investors, particularly those that are less experienced or 'sophisticated' (Elliott 2006; Frederickson & Miller 2004; Godfrey, Mather & Ramsay 2003; James & Michello 2010; Marques 2010; Merkl-Davies & Brennan 2007). It is therefore imperative that the reporting of these figures not be misleading, and that companies commit to following the guidelines suggested by ASIC.

An analysis of the terminology used by companies to label the non-GAAP profit figures raised several areas of concern, including the large variety of different terms used across the sample, the use of different terms by the same company across different years, and the use of a variety of different terms by the same company for the same figure in the same year. Although this labelling has become more consistent between and within companies since 2009, there is still a wide variety of labels being used by companies, which can cause confusion to shareholders and investors.

Research Question 1 investigated the influence certain company characteristics may have on the decision to report a non-GAAP profit figure. Size, leverage and having a 'bad news' year were statistically significantly related to this decision for the total sample as a whole. Size and leverage were also statistically significant in the majority of the years covered by the study, with larger companies and more highly leveraged companies choosing to report non-GAAP

profit figures. Although statistically significant in some years, the variable 'ownership concentration' did not influence the decision to report non-GAAP profits in the majority of the years in the study.

Research Question 2 investigated whether certain events may have influenced the decision to report a non-GAAP profit figure. As mentioned above, the reporting of non-GAAP profits by the companies in the sample increased steadily over the twelve years of the study. The results showed that surrounding each of the events investigated, some companies began reporting non-GAAP profits and other companies stopped reporting non-GAAP profits, with the particular event not seeming to influence the decision in one particular direction. The exception to this was between 2007 and 2009, where a statistically significant number of companies began reporting non-GAAP profits. The GFC therefore significantly influenced behaviour in one direction as far as the decision to report a non-GAAP profit figure was concerned.

The study then focussed on the use of impression management tactics concerning emphasis when reporting non-GAAP profit figures with Research Questions 3 and 4. Impression management tactics to strategically emphasise non-GAAP profit figures can influence perceptions of the company's performance and mislead shareholders and other users (Elliott 2006; Frederickson & Miller 2004; Godfrey, Mather & Ramsay 2003; James & Michello 2010; Marques 2010; Merkl-Davies & Brennan 2007). Recommendations that the GAAP figure should be given equal or greater prominence than the non-GAAP figure were key in both the AICD and FINSIA guidelines and the ASIC Regulatory Guide 230, highlighting the importance of this issue (AICD & FINSIA 2009; ASIC 2011).

Research Question 3 investigated the influence certain company characteristics may have on the use of impression management tactics to highlight the non-GAAP figure compared to the GAAP figure. For the total sample, size, leverage and good/bad news years significantly influenced the use of impression management tactics in the press release. Ownership concentration and good/bad news years were statistically significant for the total sample in the total of both documents investigated. On a year-by-year basis, leverage had a statistically

significant effect on the use of impression management tactics in seven of the ten significant models. Size, ownership concentration and good/bad news years were found to influence the choice to use impression management tactics in only a few instances.

Research Question 4 investigated the influence certain events may have had on the use of impression management tactics to emphasise the non-GAAP profit figure compared to the GAAP profit figure. The use of impression management tactics to emphasise non-GAAP over GAAP significantly increased during the GFC in the press release and significantly decreased after the release of the ASIC Regulatory Guide 230 in the press release. The results for the annual report were not significant, highlighting the importance of the press release as a timely instrument for the use of impression management tactics. Results showed that the relative emphasis was equal, or favoured the GAAP figure, in the years directly following the release of the ASIC Regulatory Guide. The Guide required equal or greater prominence to be given to the GAAP figure and hence appeared to be effective. However, in 2015 the emphasis reverted to the non-GAAP figure being slightly more prominent which indicates a change in behaviour that may cause concern to ASIC and shareholders alike.

The results highlight the importance placed on the press release, as opposed to the annual report, as a timely avenue for the use of impression management tactics. The annual results press release serves a dual purpose of imparting information about the company's performance, and also a promotional or persuasive purpose of attempting to 'favourably influence readers' views of that performance' (Henry 2008, p. 368). Previous studies have shown that not only are people strongly influenced by the first piece of information to which they are exposed, but that information biases their evaluation of any subsequent information (Asch 1946; Hirshleifer & Teoh 2003; Huang, Nekrasov & Teoh 2012; Lim, Benbasat & Ward 2000). The information in press releases is usually unaudited and the document is often released a couple of months or more before the annual report. This means it offers a prime opportunity to influence the thinking and decision making of shareholders and other users of financial information. This is an important finding that highlights the need for ASIC to monitor all disclosure documents in their annual reviews and not simply financial reports.

Further analysis of the use of impression management tactics concerning emphasis revealed that the behaviour of companies regarding the use of impression management to emphasise the non-GAAP profit figure has changed little over the twelve years. The more significant change in behaviour related to the emphasis of the GAAP profit figure. The results showed that since 2006, the year the majority of the sample companies had to fully implement IFRS for the first time, the emphasis of non-GAAP figures has been reasonably constant. There was a statistically significant increase in emphasis on non-GAAP figures for the annual report and the total of the two documents between 2005 and 2006 and for the press release and the total of the two documents between 2004 and 2006. However, since 2006 companies have not significantly emphasised the non-GAAP figure to a greater or lesser extent. Even the introduction of ASIC Regulatory Guide 230 had little effect on the emphasis scores for non-GAAP figures. Instead, the statistically significant changes in behaviour since 2006 concerned the emphasis placed on the GAAP figure. This figure was less emphasised during the GFC and more emphasised since the introduction of the ASIC Regulatory Guide. This is an important finding as it highlights the need for research to assess the use of impression management tactics for both non-GAAP and GAAP figures.

The results also highlight the poor uptake of the ASIC Regulatory Guide 230 requirement that companies provide a full reconciliation between the GAAP and non-GAAP profit figures with adjustments separately itemised and explained (ASIC 2011, p. 18). The Guide also requires this reconciliation to be present in each document containing a non-GAAP figure (ASIC 2011, p. 20). Although there has been marked improvement in providing reconciliations in annual reports since the release of the ASIC Regulatory Guide, the practice is lacking in annual results press releases with only 31% of companies providing a full reconciliation in this document in 2015. The reconciliations that do appear in annual reports are often included in the "Notes" section after the financial statements, a section that inexperienced shareholders and investors may not necessarily read or understand. The lack of reconciliations in press releases could be construed as part of the impression management tactics employed by the companies and also challenges the value relevance argument for disclosing non-GAAP profit figures. If the calculation and disclosure of a non-GAAP profit figure is an attempt to provide incremental, value-relevant information then the presence of a detailed reconciliation should only enhance the provision of such information. Previous studies have shown that the

presence of a reconciliation mitigates the effects of impression management (Allee et al. 2007; Elliott 2006; Marques 2010) and press releases, being unregulated and more timely than annual reports, are prime documents for the use of opportunistic behaviour by management. Therefore, not including a reconciliation, even when regulation requires it, supports the opportunistic motive argument.

9.3 Contributions and Implications of the Study

This study makes contributions to theory and to the literature concerning impression management, determinants of voluntary disclosure and agency theory. Firstly, it contributes to agency theory by exploring the relationship between information asymmetry, bonding mechanisms and the residual loss empirically in an applied situation, that is, the disclosure of non-GAAP profit figures. The study finds that company characteristics (such as size, leverage and the reporting of 'bad' news) and specific events (such as the GFC) exacerbate information asymmetry and lead to additional voluntary disclosure in the form of non-GAAP profits as a bonding mechanism. The study also finds that during certain events such as the GFC, managers behave opportunistically by taking advantage of any residual loss and use impression management tactics to potentially mislead shareholders and investors. However, this opportunistic behaviour can be tempered by regulation surrounding the provision of non-GAAP information. The use of impression management tactics to emphasise the non-GAAP figure compared to the GAAP figure decreased in both the press release and annual report after the release of the ASIC Regulatory Guide 230 in December 2011. In fact, the relative emphasis score showed that after the introduction of this regulation, the GAAP profit figure was emphasised more than the non-GAAP profit figure, on average, for the first time since 2005 with a statistically significant change in the relative emphasis in the press release between 2010 and 2012. A possible explanation for this is that the release of the Regulatory Guide, and follow-up surveillance by ASIC, provided additional external monitoring which resulted in a reduction of the residual loss.

Secondly, the study contributes to the growing literature on non-GAAP profits by looking at the phenomenon with the same sample of companies over an extended timeframe of twelve years. Previous studies have generally investigated the practice over a period of one to three

years and often totalled the data from each year rather than investigating the years individually. This study uses one of the longest time periods covered in any study on non-GAAP profits and investigates the data from each year separately as well as the total sample. By studying each year separately, the results illustrate how different events affect the decision to report a non-GAAP profit and the use of impression management tactics when doing so. It is one of only a few studies that investigate the reporting of non-GAAP profit figures around the GFC and the release of the ASIC Regulatory Guide 230. It is also the only study that investigates the effect of the introduction of IFRS in Australia on the practice of reporting non-GAAP profit figures.

The study also contributes to the literature on non-GAAP profits as it is one of a limited number of studies conducted in the Australian context. Marques (2017) highlights the lack of studies in the Australian context, calling not only for more studies from the country but also for studies that investigate the influence of IFRS and the introduction of the ASIC Regulatory Guide. This study fills these gaps in the literature. Of the limited studies based in Australia, only a couple have adopted an opportunistic behaviour perspective (Cameron, Percy & Stevenson-Clarke 2012; Johnson et al. 2014), with one of these involving an experiment and not based on actual company reports (Johnson et al. 2014). Studies concerning non-GAAP profits are overwhelmingly based in the US, which has had regulation covering the practice since 2002. For eight of the twelve years covered by this study, the practice of reporting non-GAAP profits was not regulated in Australia. The results therefore provide valuable insights into the practice of reporting non-GAAP profits, and the use of impression management tactics when doing so, in an environment not constrained by regulation. ASIC's Regulatory Guide 230 was released in December 2011, meaning the last four years of this study were in a 'regulated' environment. However, it is important to remember that unlike Regulation G in the US, which was made law through the Sarbanes-Oxley Act of 2002, ASIC's Regulatory Guide 230 is a guide released by ASIC and is not actual law. This study is also one of only a few that covers the introduction of the ASIC Regulatory Guide in Australia and its effect on the use of impression management tactics in the time following its release.

Thirdly, the study extends the body of work on impression management. Extant impression management literature has questioned 'management intentionality' with reference to the use

of impression management tactics and whether this behaviour is conscious or unconscious (Guillamon-Saorin, Garcia Osma & Jones 2012, p. 162). It could be argued that any use of impression management tactics concerning emphasis of the non-GAAP profit figure compared to the GAAP profit figure since the release of the ASIC Regulatory Guide 230 is a conscious choice as the guide explicitly prohibits this behaviour. The study also contributes to the impression management work through the findings that companies did not radically change their use of impression management tactics when reporting non-GAAP profit figures. In reality, the observed change in behaviour surrounding the GFC and the release of the ASIC Regulatory Guide related to the use of impression management tactics when reporting the GAAP figure. This figure was less emphasised during the GFC and more emphasised post the Regulatory Guide's release. This finding shows that the calculation of a relative emphasis score (the emphasis of non-GAAP profits relative to the emphasis of GAAP profits) is imperative as a tool in studies on impression management and earnings figures. A study focussed on changes in the use of impression management tactics and non-GAAP figures only would not have shown significant results around the particular events under investigation and the reporting behaviour as far as emphasis of one particular figure over the other would not have been fully comprehended and reported.

Finally, the study makes a methodological contribution to the impression management literature through the development of a comprehensive impression management index concerning emphasis and prominence in both press releases and annual reports. Although previous studies have developed coding schemes to measure emphasis of non-GAAP profits or relative emphasis of non-GAAP compared to GAAP profit figures, these studies have overwhelmingly only coded the first occurrence of each type of number and concentrated on only one document (press release). This study develops a detailed coding schema that identifies figures beyond the first occurrence and codes both GAAP and non-GAAP figures for prominence and repetition in both the press release and annual report.

This study also makes contributions to practice. Firstly, this study informs regulators, professional bodies, managers, shareholders and investors about non-GAAP profit reporting in Australia and the shortfalls in reporting practices. The study raises awareness of the many and varied labels given to non-GAAP profits by companies. These labels differ between

different companies, within companies from year to year and even within a single company in a single year (the use of multiple labels for the same figure in the same year has been observed in some companies). There was no standard formula for calculation which makes comparability across companies and over time difficult. The study also highlights some of the more disturbing practices of reporting companies, including excessive emphasis of non-GAAP compared to GAAP profits and the lack of explanation in the form of a reconciliation between the figures. There were extreme examples in 2015 (four years post the ASIC Regulatory Guide) where some companies did not even report the GAAP profit in the annual results press release, but did report and highlight a non-GAAP profit. Although non-GAAP figures have been shown to have predictive value and can be useful to various stakeholders, their reporting is voluntary and strategic on the part of management. Consistent calculation and labelling and the provision of a reconciliation is therefore imperative to allow shareholders and investors to make informed decisions about the usefulness of these earnings figures. Any reconciliation needs to be prominently displayed and included in each document that includes a non-GAAP profit figure.

Secondly, it highlights the effectiveness of guidelines from professional bodies compared to a Regulatory Guide from ASIC. The release in March 2009 of *Underlying Profit: principles for reporting of non-statutory profit information* by AICD and FINSIA (AICD & FINSIA 2009) appeared to have some effect on behaviour surrounding the reporting of non-GAAP profits but none of the changes were statistically significant. Simple changes suggested by the Guide, such as using the term ‘underlying profit’ were adopted by many companies with the use of that particular term increasing from 27% of the non-GAAP reporters in 2008 to 49% in 2011. However other suggestions such as not giving undue prominence to the non-GAAP figure and providing a detailed reconciliation between the figures were not significantly implemented by companies. The ASIC Regulatory Guide 230 had a much more prominent and significant effect on behaviour, particularly with respect to giving equal or greater prominence to the non-GAAP figure. These results indicate that professional guidelines are not as effective as guides from regulators such as ASIC. This finding has implications for various professional bodies that release guidelines to members. Much work and consideration goes into the development of such guidelines and the poor uptake of the suggestions should cause concern for the bodies involved.

Thirdly, it highlights issues with education and enforcement by ASIC of its Regulatory Guides. ASIC is the corporate regulator in Australia and has powers to administer and enforce the law, in particular the *Corporations Act 2001*. Regulatory Guides form part of the regulation framework and give guidance to entities by explaining how ASIC interprets the law. Although Regulatory Guide 230 had a significant effect on behaviour, particularly with respect to giving equal or greater prominence to the non-GAAP figure, the Guide was not being followed by all companies. This is particularly so with the requirement to provide a detailed reconciliation in each document where the non-GAAP profit is disclosed. Also, some companies still blatantly emphasised the non-GAAP profit figure over the GAAP figure after the release of the Guide. ASIC conducts six-monthly reviews to determine the compliance or otherwise with Regulatory Guides. In the years 2012, 2013 and 2014, the reporting of non-IFRS financial information was listed as an area of focus for ASIC in its review of financial reports (ASIC 2012a, 2012b, 2013a, 2013c, 2014a, 2014b). For each of these years, ASIC indicated that they contacted a small number of companies with concerns about their compliance. However, from 2015 to 2017 there was no mention of non-IFRS information in the documents concerning areas of focus (ASIC 2015a, 2015b, 2016a, 2016b, 2017a, 2017b, 2017c). If ASIC is serious about enforcement of its Regulatory Guides, then they need to remain vigilant in both education about requirements of the Guides, and enforcement of the requirements, even years after the release of particular guides.

9.4 Limitations of the Study

As with any study, this study has limitations that need to be considered. The population used in this study was the Standard & Poor's ASX 200 Index, obtained on 31 August 2015. The companies on this list accounted for 72% of the Australian equity market as at that date (Market Index 2015). Although the range of sizes of companies in the sample is vast (as measured by market capitalisation), the use of this index as the population in the study excludes the many medium to small companies listed on the Australian Securities Exchange. Therefore, the results of the study may not be extrapolated to smaller listed entities.

As this was a longitudinal study, it was imperative that the sample remained consistent throughout the twelve years to accurately gauge changes in behaviour. This meant that several companies that were not listed for this entire period were eliminated, leaving a final sample of 109 companies. This relatively small sample size meant that some of the tests used in the analysis were more sensitive to the effect of outliers. The small sample size also made it difficult to fully investigate the effect of industry as some industry sectors were represented by only two or three companies.

The results indicate that some managers behaved opportunistically by giving non-GAAP profit figures greater prominence than GAAP profits, particularly in times of economic downturn. Prior research has suggested that this behaviour may mislead shareholders and potential investors, particularly those that are inexperienced (e.g. Elliott 2006; Frederickson & Miller 2004; Johnson et al. 2014). However, the effect of impression management on investors and other users of the reports was not investigated in this study and no claim is made that the readers of the documents involved were actually misled.

This study investigated the influence certain events may have had on the choice to calculate and report a non-GAAP profit figure and on the use of impression management to emphasise this profit over the GAAP profit. It must be acknowledged that other factors, apart from the specific events studied, may have caused some of the effect identified in the results. For example, the continued release and revision of various accounting standards over the years of the study may have had an influence. The initial introduction of IFRS from periods beginning 1 January 2005 was investigated in this study but not the introduction or revisions of individual accounting standards after that. However, it is reasonable to expect that any changes to individual accounting standards would most likely influence the calculation of the non-GAAP profit figures in order to show financial results without the relevant changes. Particular items that are included or excluded in the non-GAAP profit is not part of this study. It is considered unlikely that an individual accounting standard would affect the decision to report a non-GAAP profit figure or to use impression management when doing so.

This study adopts the perspective that the two contrasting motives postulated by extant literature for the reporting of non-GAAP profit figures are not mutually exclusive and can indeed coexist. Events and firm characteristics influencing the decision to report non-GAAP profits were investigated with no assumption of opportunistic behaviour. The use of impression management tactics was then also investigated which does imply opportunism. The study did not investigate the value relevance of the non-GAAP figures and makes no claim as to whether the figures themselves provided incremental information to shareholders and other stakeholders.

9.5 Suggestions for Future Research

The findings and limitations of this study give rise to several areas for future research. To date only a small number of studies have been conducted into the practice of reporting non-GAAP profits in an Australian context and further research would enhance the understanding of both regulators and shareholders into the practice. The findings of this research could be enhanced by extending it to include a larger sample, a longer timeframe and an investigation of compliance with the other requirements of the ASIC Regulatory Guide 230. The use of the Top 200 as the population meant that many small to medium companies were not included in the analysis. Similar analysis could be conducted on these smaller listed entities to see if the patterns observed in this study are replicated in smaller companies, where the effects of information asymmetry and the residual loss may not be as pronounced.

Apart from this study, little to no research has yet been conducted on the effect of the ASIC Regulatory Guide 230. This study looks at two aspects of the guide, giving equal or greater prominence to the GAAP profit figure and providing a detailed reconciliation between the two figures. However, compliance with other requirements of the guide are yet to be investigated. This study provides some evidence that the downward trend in emphasising non-GAAP compared to GAAP observed after the release of the ASIC guide was in fact beginning to reverse in 2015. Future research could extend the timeline of this study to the present time to see if the passing years, and less vigilance from ASIC in regard to non-GAAP profits, have resulted in the re-emergence of old habits of companies concerning emphasis of non-GAAP profits. This research may also involve interviews with ASIC representatives, which could be

conducted to determine why the organisation does not follow up more rigorously on non-compliance with Regulatory Guides, particularly once they have been released for a few years.

At a more general level, different aspects of the use of impression management tactics when reporting non-GAAP profit figures in Australia could be investigated. This study focussed on the use of emphasis but other topics that could be investigated include selectivity of the profit figures reported, the use of prior period benchmarks to make favourable comparisons to current performance and the manipulation of the calculation of non-GAAP profit figures to meet or beat analysts' forecasts. Also, the effect of factors such as board composition and media attention on the reporting of non-GAAP profit figures and the use of impression management tactics when reporting the figures could provide interesting results.

The narrative surrounding the reporting of non-GAAP profit figures could also provide an interesting area of research, involving an analysis of the explanations and reasons given by companies in press releases and annual reports for the calculation and reporting of non-GAAP profit figures. This could then be extended to a yet to be investigated area of impression management. Management could be interviewed regarding their views, motives and concerns re the use of non-GAAP profit figures. Their reasons for highlighting one particular figure over another could be utilised to strengthen and complement the results of this and other studies.

Finally, from an international perspective, few comparative studies into the practice exist. Interesting results and implications may be gleaned from studies that compare the Australian context with countries such as the US, where strict regulation has been in place since 2002, or other countries such as some European countries where the practice is not regulated at all. A comparison between voluntary non-GAAP reporting and mandatory non-GAAP reporting could also be conducted by contrasting the Australian situation to that in South Africa where regulation makes it mandatory to report such a figure.

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APPENDICES

Appendix 1 - Companies included in final sample

No	ASX Code	Company Name	GICS Industry Sector
1	ABP	Abacus Property Group Stapled	Real Estate
2	ABC	Adelaide Brighton Limited	Materials
3	AGI	Ainsworth Game Technology Limited	Consumer Discretionary
4	ALQ	Als Limited	Industrials
5	AMP	AMP Limited	Financials
6	APA	APA Group Stapled	Utilities
7	HT1	APN News & Media Limited (now HT&E Ltd)	Consumer Discretionary
8	ARB	ARB Corporation Limited	Consumer Discretionary
9	AAD	Ardent Leisure Group Stapled	Consumer Discretionary
10	ALL	Aristocrat Leisure Limited	Consumer Discretionary
11	ARI	Arrium Limited	Materials
12	ASX	ASX Limited	Financials
13	ANZ	Australia And New Zealand Banking Group Limited	Financials
14	AAC	Australian Agricultural Company Limited	Consumer Staples
15	AOG	Aveo Group Stapled	Real Estate
16	AWE	AWE Limited	Energy
17	BOQ	Bank of Queensland Limited	Financials
18	BPT	Beach Energy Limited	Energy
19	BEN	Bendigo And Adelaide Bank Limited	Financials
20	BSL	Bluescope Steel Limited	Materials
21	BLD	Boral Limited	Materials
22	BRG	Breville Group Limited	Consumer Discretionary
23	BWP	BWP Trust Ord Units	Real Estate
24	CAB	Cabcharge Australia Limited	Industrials
25	CTX	Caltex Australia Limited	Energy
26	CDD	Cardno Limited	Industrials
27	CGF	Challenger Limited	Financials
28	CQR	Charter Hall Retail Reit Unit	Real Estate
29	CIM	Cimic Group Limited	Industrials
30	CCL	Coca-cola Amatil Limited	Consumer Staples
31	COH	Cochlear Limited	Health Care
32	CBA	Commonwealth Bank of Australia	Financials
33	CCP	Credit Corp Group Limited	Financials
34	CMW	Cromwell Property Group Stapled	Real Estate
35	CSR	CSR Limited	Materials
36	DOW	Downer Edi Limited	Industrials
37	DLS	Drillsearch Energy Limited	Energy
38	DUE	Duet Group Forus	Utilities
39	EVN	Evolution Mining Limited	Materials
40	FXJ	Fairfax Media Limited	Consumer Discretionary
41	FLT	Flight Centre Travel Group Limited	Consumer Discretionary
42	GPT	GPT Group Stapled	Real Estate
43	GNC	Graincorp Limited	Consumer Staples
44	GUD	GUD Holdings Limited	Consumer Discretionary
45	GWA	GWA Group Limited	Industrials
46	HVN	Harvey Norman Holdings Limited	Consumer Discretionary
47	ILU	Iluka Resources Limited	Materials
48	IPL	Incitec Pivot Limited	Materials
49	IGO	Independence Group NL	Materials
50	IAG	Insurance Australia Group Limited	Financials
51	IOF	Investa Office Fund Stapled	Real Estate
52	IVC	Invocare Limited	Consumer Discretionary

No	ASX Code	Company Name	GICS Industry Sector
53	IFL	Ioof Holdings Limited	Financials
54	IRE	Iress Limited	Information Technology
55	JBH	JB Hi-fi Limited	Consumer Discretionary
59	MMS	Mcmillan Shakespeare Limited	Industrials
60	MTS	Metcash Limited	Consumer Staples
61	MGR	Mirvac Group Stapled	Real Estate
62	MRM	Mma Offshore Limited	Industrials
63	MND	Monadelphous Group Limited	Industrials
64	NAB	National Australia Bank Limited	Financials
65	NCM	Newcrest Mining Limited	Materials
66	NST	Northern Star Resources LTD	Materials
67	NUF	Nufarm Limited	Materials
68	ORI	Orica Limited	Materials
69	ORG	Origin Energy Limited	Energy
70	OZL	Oz Minerals Limited	Materials
71	PBG	Pacific Brands Limited	Consumer Discretionary
72	PPT	Perpetual Limited	Financials
73	PMV	Premier Investments Limited	Consumer Discretionary
74	PRY	Primary Health Care Limited	Health Care
75	QAN	Qantas Airways Limited	Industrials
76	RHC	Ramsay Health Care Limited	Health Care
77	REA	REA Group LTD	Information Technology
78	RRL	Regis Resources Limited	Materials
79	SAI	SAI Global Limited	Industrials
80	SFR	Sandfire Resources NL	Materials
81	STO	Santos Limited	Energy
82	SHV	Select Harvests Limited	Consumer Staples
83	SXY	Senex Energy Limited	Energy
84	SVW	Seven Group Holdings Limited	Industrials
85	SWM	Seven West Media Limited	Consumer Discretionary
86	SIG	Sigma Pharmaceuticals Limited	Health Care
87	SGM	Sims Metal Management Limited	Materials
88	SRX	Sirtex Medical Limited	Health Care
89	SHL	Sonic Healthcare Limited	Health Care
90	SGP	Stockland Stapled	Real Estate
91	SUN	Suncorp Group Limited	Financials
92	SUL	Super Retail Group Limited	Consumer Discretionary
93	TAH	Tabcorp Holdings Limited	Consumer Discretionary
94	TGR	Tassal Group Limited	Consumer Staples
95	TNE	Technology One Limited	Information Technology
96	TLS	Telstra Corporation Limited	Telecommunication Services
97	TEN	TEN Network Holdings Limited	Consumer Discretionary
98	TPM	TPG Telecom Limited	Telecommunication Services
99	BRS	Transfield Services Limited (now Broadspectrum Ltd)	Industrials
100	TCL	Transurban Group Stapled	Industrials
101	UGL	UGL Limited	Industrials
102	VRL	Village Roadshow Limited	Consumer Discretionary
103	VOC	Vocus Communications Limited	Telecommunication Services
104	WES	Wesfarmers Limited	Consumer Staples
105	WSA	Western Areas Limited	Materials
106	WFD	Westfield Corporation Stapled	Real Estate
107	WBC	Westpac Banking Corporation	Financials
108	WOW	Woolworths Limited	Consumer Staples
109	WOR	Worleyparsons Limited	Energy

Appendix 2 - Coding rules for the determination of the Impression Management Index

Rule	*Description*
1	**Emphasis through presentation effects: Location of information, bullet points and types of font in Press Release** Non-GAAP and GAAP figures can be located in the headline, subheadings, tables or in the body of the text in the press release. Also, information may be emphasised using bullet points, bold, italics or underlining. **Headline** **Subheading** • Bullet points • Bullet points Table **Bold text**, *italics*, underlining Plain text **Coding rules for emphasis through presentation effects in Press Release, code ALL non-GAAP and GAAP figures:** ➢ code 4 if in headline ➢ code 3 if in subheadings or bullets or bold print or table at beginning of press release (before any paragraphs) ➢ code 2 if in paragraphs one or two of plain text ➢ code 1 if in paragraphs three or four of plain text ➢ code 1 if in a subheading or bullets or bold print or table in the body of the press release in amongst any paragraphs containing plain text ➢ code 0.5 if figure comes first in document out of non-GAAP and GAAP figures ➢ **do not** code plain text beyond paragraph four for emphasis ➢ **do not** code 'summary results' table at end of press release for emphasis
2	**Emphasis through presentation effects: Location of information in Annual Report** Non-GAAP and GAAP figures can be located in various sections of the annual report including highlights, chair or CEO letter, key financial statistics, directors' report, review of operations, financial statements, and notes to the statements.

	Coding rules for emphasis through location in Annual Report, code ALL non-GAAP and GAAP figures: A score is given if the number is reported in a particular section of the Annual Report. Only one score for emphasis is given for each type of number per section. If the number is repeated within a section do not score the repeated number for emphasis. ➢ code 3 if in the highlights section – this section is located at the beginning of the annual report and usually contains bullet points, graphs and/or tables ➢ code 2 if in the Chairman's letter ➢ code 2 if in the CEO letter ➢ code 1 if in the key financials ➢ code 1 if in the Directors' Report and/or the Review of Operations ➢ code 0.5 if figure comes first in the entire document out of non-GAAP and GAAP figures ➢ **do not** code Financial Statements, Notes to Statements or sections beyond the Notes to Statements
3	**Emphasis through repetition** A non-GAAP or GAAP figure reported in one section of the press release or annual report can be repeated. This repetition can serve to emphasise the figure. **Coding rules for emphasis through repetition of information in Press Release and Annual Report, code ALL non-GAAP and GAAP figures:** ➢ code and total repetition in press release and annual report separately ➢ code 0 for first time mentioned in document ➢ code 0.5 for each time a figure is repeated after the first time ➢ code entire press release, including all paragraphs and financial summary at end of document ➢ for annual report code repetition of figures to the end of the Directors' Report or Review of Operations ➢ **do not code** repetition in Financial Statements, Notes to Statements or sections beyond the Notes to Statements

Appendix 3 - Examples of coded press releases – non-GAAP coding in red, GAAP coding in blue

Example 1 - *CSR Annual Results Press Release 2005*

CSR Limited
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NSW 2067 Australia
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E-mail investorrelations@csr.com.au
www.csr.com.au
ABN 90 000 001 276

Loc NG = 10.5
Rep NG = 1.5
Loc GAAP = 3
Rep GAAP = 0.5

Headline

CSR net profit increases 25.3% to $200.8 million

loc NG +4
loc NG appears 1st +0.5

Highlights

Bullets at Beg

- Net profit before significant items up 25.3% to $200.8 million

loc NG +3
rep NG +0.5

- $400 million of announced growth initiatives underway
- Final dividend declared of 6 cents per share with franking lifted to 100%
- Capital return of 20 cents per share or $182 million, subject to shareholders' approval

Parag 1 or 2

CSR Limited today announced a 25.3% increase in net profit before significant items to $200.8 million for the year ended 31 March 2005. CSR's Sugar and Property operations improved strongly while Building Products and Aluminium were down on the previous year. Earnings per share before significant items were up 28.1% to 21.9 cents compared with 17.1 cents last year.

loc NG +2
rep NG +0.5

CSR's total net profit after tax was $287.1 million which includes significant items relating to settlements paid to CSR following resolution of some longstanding litigation issues and the one-off tax benefit of $55 million as a result of entry during the year into tax consolidation.

loc G +2

Trading revenue rose 20.1% to $2,367.5 million due principally to the inclusion of $261.8 million in revenue from Sugar refineries following full consolidation from 1 October 2004. Earnings before interest, tax and significant items (EBIT) were up 22.6% to $322.0 million. Profitability improved with the EBIT margin (EBIT/trading revenue) increasing to 13.6% from 13.3%. Return on shareholders' funds lifted to 16.2% – the highest level in three years.

Financial results summary

Table in Body

Full year ended 31 March [$ million unless stated]	2005	2004	% change
Trading revenue	2,367.5	1,970.8	20.1
Earnings before interest, tax, depreciation and amortisation – EBITDA	438.0	369.6	18.5
Earnings before interest and tax – EBIT	322.0	262.7	22.6
Net profit before significant items	200.8	160.2	25.3
Significant items	86.3	–	
Net profit after significant items	287.1	160.2	79.2
Earnings per share before significant items [cents]	21.9	17.1	28.1
Earnings per share after significant items [cents]	31.3	17.1	83.0
Net operating cash flow	320.7	290.1	10.5
Key measures			
EBIT/trading revenue [%]	13.6	13.3	
Return on shareholders' funds [%]	16.2	14.9	
As at 31 March	2005	2004	
Gearing – net debt / net debt + equity [%]	16.5	12.5	

loc NG +1
rep NG +0.5

loc G +1
rep G +0.5

Overview

"CSR has delivered a 25% increase in net profit before significant items, a higher total dividend and full franking, and a proposed capital return of 20 cents a share," said Managing Director and CEO Alec Brennan.

"We are also starting to see benefit from over $400 million in growth initiatives announced over the past two years and our efforts to improve operational performance are reflected in this year's results."

"CSR's strong performance this year is a powerful testament to the continuing vigour of this company after 150 years of operation," Mr Brennan said.

Review of significant items

CSR made good progress resolving a number of major issues this year – accounted for in the profit result as significant items totalling $86.3 million.

CSR reached settlements with various insurers under which CSR was paid $45.3 million. As a result of the settlement, $39.4 million of deferred legal costs were written off. CSR is continuing its proceedings against a number of other insurers and currently expects the trial to commence in or about October 2005.

CSR received $21.6 million from Alcan Northern Territory Alumina Pty Limited and wrote back provisions of $3.8 million in settlement of a dispute that arose following sale of our interest in the bauxite and alumina joint venture at the Gove Peninsula in the Northern Territory in January 2001.

Also, CSR's entry into the tax consolidation system provided a one-off tax benefit of $55.0 million.

Financial review

CSR's net debt and gearing increased during the year as a result of spending on a number of growth projects but both remain low. Gearing (measured as net debt/net debt + equity) ended the year at 16.5% with net debt rising to $270.1 million.

As announced in May 2004, the on-market buyback that commenced in 2003 was extended for a further 12 months ending on 10 June 2005. During the year ended 31 March 2005, 4.8 million shares were purchased at an average price of $2.03 a share. The directors have decided that no further shares will be purchased under this buyback.

CSR continues to pay a significant proportion of sustainable profit as dividends, subject to available franking credits. The final dividend to be paid on 4 July will be 6 cents a share, bringing total dividends for the year to 12 cents a share, up from 11 cents, with franking increased from 70% to 100%.

Proposed capital return of 20 cents per share or $182 million

CSR proposes to make a return of capital of 20 cents per share or $182 million. This proposal is part of the company's ongoing strategy of actively managing the balance sheet to create value for shareholders.

The directors believe that return of capital will give the company a more efficient capital structure appropriate to CSR's range of businesses and liabilities, while retaining flexibility for future growth.

The company understands that the Australian Taxation Office will issue a class ruling for CSR shareholders confirming that receipt of the return of capital will not be subject to tax.

If the capital return is approved by shareholders, CSR's gearing is expected to increase to approximately 30% from 16.5%. Interest expense after tax will increase by approximately $8 million per year ($5 million in the financial year ending 31 March 2006). Interest cover (EBITDA / net interest expense) is expected to remain within conservative levels.

Review of results by segment

Earnings before interest, tax and significant items (EBIT) by segment

Full year ended 31 March [$ million unless stated]	2005	% total segment EBIT	2004	% total segment EBIT	% change
Building Products	108.0	29.3	112.6	36.3	-4.1
Aluminium	141.9	38.5	144.2	46.5	-1.6
Sugar	89.8	24.4	37.6	12.1	138.8
Property	28.6	7.8	15.9	5.1	79.9
Business segment total	368.3	100.0	310.3	100.0	18.7
Corporate costs	-16.9		-18.6		
Restructure and provisions [1]	-29.4		-29.0		
Total EBIT	322.0		262.7		22.6

1. Includes product liability and superannuation top-up payments.

Building Products Trading revenue of $932.3 million rose slightly by 1.6% with new marketing initiatives offsetting a sharp slowdown in residential building construction in New South Wales and Victoria. EBIT of $108.0 million fell by 4.1% as additional costs were incurred for initiatives to enhance customer service and reduce longer term factory and distribution costs. These changes are expected to support the acceleration of our operational improvement program this year.

Aluminium Trading revenue from aluminium sales, including hedging, rose 5.4% to $473.6 million. EBIT of $141.9 million was 1.6% down on the previous year as higher aluminium prices and production were offset by a higher A$/US$ exchange rate and lower prices from hedged sales. Tomago completed construction of its 15% expansion project on time and on budget.

Sugar Trading revenue rose to $960.5 million from the previous year's low level of $600.2 million. This increase includes $261.8 million of additional revenue from the sugar refining businesses. The financial results for Sugar Australia and New Zealand Sugar Company were consolidated into CSR's accounts from 1 October 2004 following the acquisition of an additional 25% stake in the joint ventures.

EBIT was $89.8 million, up from $37.6 million. The improvement followed a recovery of world raw sugar prices. The sugarcane crop was above that of the previous season, due to the success of industry productivity initiatives and improved weather during the growing season. The result was also boosted by the acquisition of the additional share in the refined sugar businesses and a payment to CSR under the first part of the Australian Government's sugar reform program (announced in April 2004).

Property EBIT improved to $28.6 million from $15.9 million, following the hand over of land for a major residential development in Woodcroft, Sydney.

$400 million of announced growth projects under way

Over the past two years, over $400 million has been committed for growth projects and acquisitions.

Building Products CSR initiated expansions at brick plants in Oxley, south of Brisbane, and in New Lynn, Auckland. In Insulation, the Ingleburn glasswool factory in Sydney's south will increase capacity by 50%.

In January 2005, the company acquired the Karreman concrete roof tile business in Brisbane for $12.5 million, enabling CSR to expand in the growing south east Queensland market.

In Asia, growth continues in the China insulation business to meet growing demand in the Asian region. Commissioning of the new leased Nanning glasswool insulation plant was completed in August 2004. The expanded Dongguan rockwool plant began production in March 2005.

Aluminium CSR invested $75 million as its share in a project to expand capacity at Tomago aluminium smelter, near Newcastle, NSW.

Sugar A 63 megawatt renewable electricity plant under construction at the Pioneer raw sugar mill in the Burdekin River District, North Queensland, is to be operating during this year's sugarcane harvesting and milling season. This will expand CSR's commercial generation of renewable electricity – fuelled by sugarcane waste fibre.

The project is expected to generate returns above the cost of capital notwithstanding that the project will now cost approximately $140 million, up from the initial estimate of $100 million. This increase is due to changes in the scope of the project and escalation in the cost of labour and materials. The renewable energy plant was originally approved on the basis of operating for about eight months each year, primarily during the sugarcane milling season. To boost returns further, plans are being developed to operate the plant all year round.

In April 2004, CSR increased its stake in the Sugar Australia joint venture and New Zealand Sugar Company Limited by 25% to 75% with the acquisition of Man Group plc's interest for $61 million.

Property This year $32 million was approved for infrastructure and road construction on the Erskine Park, Sydney, former quarry site. The 100 hectare site will be sold or developed and leased as industrial zoned land over the next two or three years.

Outlook for the year ahead

Commenting on the outlook for the year ahead, Mr Brennan noted that CSR's profit performance is subject to a number of influences, including movements in exchange and interest rates, commodity prices (including fluctuations in the raw sugar market) and levels of building activity. "At this early stage in the year, we would expect a result broadly in line with last year."

Building Products "Our plans for this year are based on the expectation that the number of new dwellings will fall by around 5%. This should be partly offset by demand from the commercial building sector. With the benefit of operational improvement initiatives across the businesses, the Building Products' result is expected to be broadly in line with last year."

Aluminium "Lower A$ returns will reduce Aluminium EBIT by between 5% to 10%. The rate of growth in aluminium demand is expected to slow. However, earnings will continue to be supported by the current hedging position."

Sugar "Reasonably good growing conditions are expected this season, but the sugarcane crop should be slightly below that of last season. Assuming that world raw sugar prices remain at current levels, combined with additional revenue from the renewable energy plant at Pioneer mill, the Sugar result should be broadly in line with last year."

Property "Results are expected to be at least in line with last year following the completion of the first sale of land at Erskine Park and further development of the Ferntree Gully, Melbourne, properties."

The result will also be impacted by CSR's adoption of International Financial Reporting Standards from 1 April 2005, which is likely to increase profit after tax for the year by approximately 3% to 5%.

18 May 2005

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Example 2 – *IOOF Annual Results Press Release 2007*

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Melbourne VIC 3001
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Loc NG = 5.5
Rep NG = 0.5
Loc GAAP = 1
Rep GAAP = 0

ASX/MEDIA RELEASE

28 August 2007

IOOF reports strong profit and funds growth

Bullets at Beg

- **Reports Underlying Net Profit after Tax of $29.2 million; up 26 per cent**
- **Strong growth in FUMA to $34.8 billion; up 14 per cent**
- **Underlying EBITA improves by 22 per cent to $42.1 million**
- **Increases full-year dividend by 22 per cent to 33 cents per share**
- **Final Dividend of 18 cents per share payable on 11 October**

loc NG +3
loc NG appears 1st +0.5

Parag 1 or 2

IOOF Holdings Ltd (ASX:IFL) one of Australia's leading funds management groups, today reported its full-year earnings result, with underlying net profit after tax increasing by 26 per cent to $29.2 million for the year ended 30 June 2007 (2006: $23.1m).

loc NG +2
rep NG +0.5

Underlying earnings before interest, tax and amortisation (EBITA) increased by 22 per cent to $42.1 million (2006: $34.4 million).

Para 3 or 4

Reflecting the strong result, IOOF has declared an increased full-year dividend of 33 cents per share, up 22 per cent from last year. The final dividend of 18 cents per share will be paid on 11 October.

IOOF's reported net profit was $22.3 million (2006: $23.1m). The lower reported profit reflects a $4.9m non-cash impact of the acquisition of Perennial Investment Partners Limited (Perennial) and a $2.0m net liability revaluation due to accounting standards treatment.

loc G +1

Chief Executive Officer, Tony Robinson, said the underlying result consolidates IOOF's successful repositioning and established a firm basis for future growth.

Funds under management and administration increased by 14 per cent to nearly $35 billion.

Retail funds under management and administration increased to $15.3 billion (2006: $13.5 billion), with a strong improvement in retail net flows in the second half.

Mr Robinson said the group's flagship administration platform, Pursuit, which was successfully launched in October, had started to achieve extensive traction in the market with net inflows of approximately $200 million to 30 June.

"We are particularly pleased with the performance of Pursuit which continues to attract significant inflows and widespread recognition for its innovative product and pricing features.

"Meanwhile our financial advice business, Consultum Financial Advisers Pty Ltd, has also grown in terms of adviser numbers and practices and continues to meet our ambitious targets."

During the year, IOOF segmented its retail business into *Portfolio Solutions* for funds administration for its platform products and *Investor Solutions* for management of funds, and also passed responsibility for retail sales of asset management to Perennial.

"We are already seeing the benefits of greater accountability in both product and channel development from this new structure which will continue to add increased value to our retail business," Mr Robinson said.

IOOF's asset management business, Perennial, increased its wholesale funds under management by 15 per cent to $19.5 billion.

Mr Robinson said solid investment performance across a range of asset classes had driven Perennial's success in attracting mandates and growing funds.

"Perennial remains well poised to benefit not only from the strong industry growth, but from its continuing strong investment performance and differentiated service offering."

Outlook

Mr Robinson said IOOF was well placed to capitalise on its market position.

"We have strengthened the individual business units by shifting the corporate focus to more of a holding company which provides support and capital to enable the business units to grow more effectively.

"The Pursuit platform is continuing to successfully attract funds and we are actively developing other product and service solutions to be delivered this year.

"We remain on track to deliver on our previous guidance of underlying earnings per share growth of 15% for the 2007/08 year."

Enquiries:
Tony Robinson
CEO, IOOF Holdings Limited
Tel. (03) 8614 4880

Example 3 – *UGL Annual Results Press Release 2014*

ASX Release

Loc NG = 9.5
Rep NG = 2.5
Loc GAAP = 5
Rep GAAP = 1.5

25 August 2014

Headline

UGL reports growth, margin improvement and underlying full year NPAT of $111.7 million

loc NG +4
loc NG appears 1st +0.5

Bullets at Beg

- **Underlying net profit after tax of $111.7 million[1] up 22 per cent and underlying EPS of 67.1 cents per share[1]** loc NG +3 rep NG +0.5
- **Reported net profit after tax of $62.1 million and reported EPS of 37.3 cents per share including impact of restructuring and DTZ separation costs** loc G +3
- **Operating revenue of $4.5 billion[2] up 6 per cent**
- **$4.3 billion in new contract wins and extensions**
- **Strong Engineering order book of $4.9 billion plus preferred status of $1.7 billion on current tenders**
- **$400-500 million estimated return to shareholders following completion of DTZ sale**

Parag 1 or 2

Sydney: UGL Limited (ASX: UGL) today reported underlying net profit after tax (NPAT) of $111.7 million[1] (FY13: $91.5 million[3]) for the year ended 30 June 2014. loc NG +2 rep NG +0.5

Reported NPAT for the year was $62.1 million (FY13: $35.9 million) including restructuring and DTZ sale costs of $68.3 million. loc G +2 rep G +0.5

Operating revenue increased 6 per cent to $4.5 billion[2] (FY13: $4.2 billion) and earnings before interest and tax (EBIT) was $185.8 million[1] (FY13: $154.7 million) up 20% on the prior year.

UGL Managing Director & CEO, Richard Leupen said: "This is a solid result for UGL, with revenue and earnings growing amidst the ongoing impact of challenging domestic operating conditions. DTZ delivered its twelfth consecutive year of earnings growth with the United Kingdom and North Asia being key contributors.

"Our Engineering business revenue was in line with the prior year while a 3 per cent increase in earnings resulted in margin improvement for the 2014 financial year, particularly in the second half. These improvements are derived from our large recurring revenue base and strong position in key markets such as rail, transport and power.

[1] Adjusted for restructuring costs, DTZ separation costs, the amortisation of acquired intangibles, gain on property sales and release of DTZ pre-acquisition provisions. The Board believes that underlying NPAT and underlying EPS provide a more accurate reflection of operating performance as the adjustments reflect costs incurred by the business which are associated with business repositioning, the DTZ sale and business acquisitions as well as non-recurring items in this period associated with the sale of non-core land and buildings and the release of DTZ pre-acquisition provisions.
[2] Includes UGL's share of joint venture revenue
[3] Adjusted for restructuring costs, rebranding, the amortisation of acquired intangibles and gain on sale of property

www.ugllimited.com

"During the year we secured $4.3 billion of new projects across the business. Our order book stands at $8.1 billion with 75 per cent of the $4.9 billion Engineering order book consisting of long term, recurring maintenance contracts.

"We are bidding on several large projects in the rail, transport infrastructure, power and oil & gas sectors. Prospects in transport infrastructure are high, with UGL shortlisted, preferred or winning many key infrastructure projects. With preferred status on $1.7 billion worth of tenders, including the North West Rail Link in Sydney and key road infrastructure projects, and other shortlisted opportunities, the outlook in this sector is solid.

"The turnaround in the performance of our power projects was a key achievement with 24 per cent growth in revenue in the 2014 financial year. Tender activity is strong, and with high win rates and a strong reputation for service delivery, we are positioned well for growth in this sector in the 2015 financial year.

"UGL was also successful in securing key resources sector maintenance contracts during the year including works for Stanwell Corporation and Chevron Australia on the Gorgon and Wheatstone LNG projects."

NPAT

FY2014 underlying NPAT was $111.7 million, an increase of 22 percent on the prior year. rep NG +0.5

Reported NPAT for the year was $62.1 million including net costs relating to restructuring $28.0 million, the DTZ sale $40.3 million and amortisation of acquired intangibles $7.7 million. Also included in reported NPAT is the gain on sale of property of $13.8 million and the release of $12.6 million of DTZ pre-acquisition provisions. Reconciliation between underlying and reported NPAT is set out in the appendix. rep G +0.5

DTZ

Revenue increased 17 per cent to $2,253 million[2] and EBIT by 9 per cent to $123.9 million[1].

Economic recovery in the United Kingdom generated strong revenue growth in corporate real estate services. Continued growth in capital markets in mainland China saw the execution of significant real estate transactions which contributed strongly to the financial performance.

The business is expected to again build on its strong performance as DTZ prepares for separation from UGL.

Engineering

Revenue declined marginally to $2,261.7 million[2] and EBIT increased by 3 per cent to $84.1 million[1] resulting in an improved margin of 3.7 per cent (FY13: 3.5 per cent). The margin in the second half of the year increased to 4.3 per cent.

Earnings were impacted by reduced freight locomotive sales and margin pressure associated with the cost focus of mining sector clients. However, there was a strong turnaround in the performance of power projects and completion of overhead cost savings initiatives contributed to earnings, particularly in the second half.

Strong performance in power systems resulted in both earnings growth and over $300 million in project wins including a $136 million contract with Alinta Energy to design, procure and construct the Newman to Roy Hill high voltage power system.

Rail maintenance continued to deliver a solid contribution to earnings with a stable and long term revenue base via UGL's partnership with MTR Corporation.

The performance of the Engineering business in the second half reflected the impact of cost savings initiatives completed in that period, with margins increasing to 4.3 per cent compared to 3.1 per cent in the first half.

Engineering's $4.9 billion order book remains solid with recurring revenues comprising 75 per cent of the order book, providing UGL with stability of earnings. Strong tender activity in infrastructure positions UGL favourably on key opportunities in transport, power projects and maintenance.

Cashflow and gearing
Operating cashflow for the year was $62.1 million impacted by restructuring and DTZ separation costs. Gearing (defined as net debt to net debt plus equity) was 32.4 per cent as at 30 June 2014 and interest cover remained solid at 5.2 times.

During the year a number of properties were sold as part of initiatives to reduce gearing, generating $72.5 million in gross proceeds.

Safety
UGL's commitment to safety is unchanged and remains a core value across all parts of the business. UGL's total lost-time injury frequency rate (LTIFR) fell to 3.02 per million hours worked. The total recordable case frequency rate (TRCFR) reduced to 6.98 per million hours worked. Engineering's LTIFR was stronger at 1.8 and the TRCFR of 7.3 was down significantly on the prior year.

Restructuring initiatives
Restructuring initiatives were undertaken midway through FY2013 in anticipation of the slowing domestic market that has now eventuated. Ongoing subdued conditions led to further restructuring initiatives being undertaken in FY2014 with costs of $39 million incurred. These initiatives were completed during FY2014 with a significant full year impact of savings to be delivered in FY2015.

DTZ sale update
On 16 June 2014 UGL announced the sale of DTZ for $1.215 billion to a private equity consortium led by TPG Capital.

The sale process is expected to conclude late in 2014, dependent on achieving regulatory approvals. UGL's Board intends to return surplus funds to shareholders after paying down debts and determining the appropriate capital structure of UGL for the future. It is estimated that surplus funds will be in the range of $400-500 million.

The Board has determined not to pay a final dividend for FY2014 but rather to implement an effective capital management plan at close of the DTZ sale.

Options have been evaluated to determine the most efficient return of funds to shareholders with a capital return expected to be a likely outcome. Details will be communicated in relation to the value of surplus funds and the form of return to shareholders following completion of the DTZ sale. The Board will seek approval from shareholders at the Annual General Meeting in October 2014.

The DTZ sale and debt reduction will also permit the Board to implement a clear dividend policy based off stable Engineering earnings and the low capital intensity of the business.

Outlook

Mr Leupen said: "We are witnessing an improved outlook for the Engineering business, with strong momentum in infrastructure opportunities. In 2014 we also saw a pleasing improvement to margins. We are actively tendering and winning significant projects in rail, transport & technology, power and oil & gas, and are shortlisted or preferred tenderer for some of Australia's largest transport infrastructure projects.

"Strong maintenance opportunities are emerging as new assets commence operation, particularly in the oil & gas and power sectors where UGL is well placed with proven history. Contract wins such as Stanwell and the Gorgon and Wheatstone projects demonstrates our world class competitiveness and strengthens our recurring revenue streams providing earnings stability into the future.

"Diversity in our earnings streams as well as a strong order book with 75 per cent generated from recurring revenue has placed UGL in a stable position through a challenging economic period. We have exposure to many key growth sectors in the domestic economy and are well positioned to capitalise on existing and emerging opportunities.

"With an order book of $4.9 billion of which $1.9 billion will be delivered in FY2015, the Engineering business is well placed to deliver revenue of around $2.4 billion this year. The completion of restructuring initiatives in FY2014 will see the business achieve normalised trading margins of around 4-5% in FY2015 after corporate costs.

"The sale of DTZ is expected to complete late in 2014 and the 2015 financial year will report a partial contribution from DTZ until the date of sale. Rationalisation of the existing UGL corporate office will also be completed on the sale of DTZ.

Annual General Meeting

UGL will hold its Annual General Meeting at the ASX Auditorium, Exchange Square, 18 Bridge Street, Sydney at 2:00pm on 30 October 2014. The company will send a notice of meeting with full details in September 2014.

ENDS

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Appendix: UGL Full Year 2014 Results Summary

The Board believes that underlying NPAT and underlying EPS provide a more accurate reflection of operating performance as the adjustments reflect costs incurred by the business which are associated with business repositioning, the DTZ sale and business acquisitions as well as non-recurring items in this period associated with the sale of non-core land and buildings and the release of DTZ pre-acquisition provisions.

Table 1: Underlying Results Overview

$m	FY14		FY13	Change
Operating revenue[1]	4,511.5		4,247.0	6%
EBIT[2,3]	185.8		154.7	20%
EBIT margin[2,3]	*4.1%*		3.6%	
Interest	(37.4)		(33.2)	(13%)
Tax	(30.2)		(24.7)	(22%)
Minority interest	(6.4)		(5.3)	(22%)
NPAT[2,3]	111.7	rep NG +0.5	91.5	22%
NPAT margin[2,3]	*2.5%*		2.2%	
EPS[2,3] (cents per share)	67.1		55.0	22%

Table 2: Reconciliation of Underlying Results

$m	Underlying	JVs	Amort of intangibles acquired	DTZ separation costs	Restructuring costs	Release of DTZ pre-acq provisions	Property gain on disposal	Statutory
Revenue	4,511.5	(469.7)	-	-	-	-	-	4,041.8
EBIT	185.8	(5.6)	(10.7)	(52.8)	(39.3)	12.6	15.3	105.3
Net interest	(37.4)	-	-	-	-	-	-	(37.4)
Tax	(30.2)	5.6	3.0	12.5	11.3	-	(1.5)	0.7
	118.1	-	(7.7)	(40.3)	(28.0)	12.6	13.8	68.5
Non-controlling interests	(6.4)	-	-	-	-		-	(6.4)
NPAT	**111.7**	-	**(7.7)**	(40.3)	**(28.0)**	**12.6**	**13.8**	**62.1**
	rep NG +0.5							rep G +0.5

[1] Includes UGL's share of joint venture revenue
[2] FY14 adjusted for restructuring costs, DTZ separation costs, the amortisation of acquired intangibles, gain on sale of property and release of DTZ pre-acquisition provisions
[3] FY13 adjusted for restructuring costs, rebranding, the amortisation of acquired intangibles and gain on sale of property

Appendix 4 - Frequency of non-GAAP profit figures and EBIT/EBITDA (percentages are percent of total sample)

	2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
Reported an EBITDA or EBIT figure	66	61	69	63	68	62	73	67	72	66	73	67	73	67	74	68	79	72	79	72	81	74	83	76
Reported a non-GAAP profit figure	50	46	53	49	57	52	57	52	64	59	69	63	71	65	72	66	75	69	79	72	88	81	86	79

Appendix 5 - Location of non-GAAP profit figures (percentages are percent of non-GAAP reporters for that year)

	2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
Press release	46	92	47	89	52	91	51	89	60	94	65	94	66	93	66	92	70	93	74	94	77	88	77	90
Annual report: Highlights	30	60	29	55	37	65	35	61	40	63	43	62	38	54	40	56	45	60	48	61	49	56	46	53
Chair or CEO letter	33	66	30	57	44	77	42	74	49	77	48	70	50	70	51	71	57	76	59	75	57	65	55	64
Directors' Report or Review of Operations	29	58	39	74	44	77	45	79	51	80	47	68	51	72	59	82	65	87	66	84	80	91	78	91
Financial Statements	4	8	7	13	5	9	4	7	6	9	6	9	6	8	4	6	3	4	3	4	4	5	2	2
Notes to Financial Statements	8	16	12	23	17	30	14	25	15	23	22	32	19	27	24	33	28	37	29	37	28	32	31	36
Other	9	18	8	15	9	16	10	18	16	25	16	23	16	23	16	22	18	24	19	24	19	22	20	23

Appendix 6 - Terminology used by companies when reporting non-GAAP profit figures

Key Terminology Used	2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
Underlying	5	10	12	23	9	16	11	19	17	27	22	32	29	41	35	49	39	52	40	51	45	51	44	51
Normalised	2	4	2	4	7	12	8	14	11	17	10	14	8	11	6	8	4	5	2	3	4	5	5	6
Operating	9	18	7	13	10	18	13	23	9	14	11	16	10	14	10	14	10	13	11	14	11	13	8	9
Cash Earnings	3	6	3	6	4	7	5	9	5	8	3	4	4	6	4	6	4	5	5	6	5	6	5	6
Profit after tax excluding …	6	12	5	9	8	14	3	5	3	5	6	9	4	6	3	4	2	3	4	5	7	8	5	6
Profit after tax before (or pre) …	15	30	17	32	10	18	7	12	10	16	9	13	8	11	7	10	8	11	9	11	8	9	9	10
Core	2	4	3	6	2	4	2	4	2	3	4	6	2	3	2	3	2	3	3	4	2	2	3	3
Distributable	1	2	1	2	2	4	3	5	3	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trading	0	0	1	2	2	4	2	4	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other	7	14	2	4	3	5	3	5	2	3	2	3	4	6	3	4	4	5	3	4	4	5	5	6
Total	50	100	53	100	57	100	57	100	64	100	69	100	71	100	72	100	75	100	79	100	88	100	86	100

Appendix 7 - Descriptive statistics for independent variables for Research Question 1

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Panel A: SIZE (log of market capitalisation)												
Companies not reporting non-GAAP profit												
Mean	8.5490	8.6579	8.8094	9.0086	8.8844	8.7502	8.8893	9.0283	9.1120	9.2790	9.3053	9.3998
Standard Deviation	0.8985	0.8615	0.8908	0.9065	1.0006	0.8757	0.7856	0.6855	0.5198	0.5426	0.5475	0.6056
1st Quartile	7.9178	8.1665	8.1909	8.5537	8.2964	8.3148	8.4607	8.4740	8.8123	8.9003	195.41	8.9321
Median	8.5986	8.6667	8.7300	8.9842	8.8416	8.7572	8.8347	9.0255	8.9847	9.1607	8.9622	9.2154
3rd Quartile	9.2001	9.2001	9.6186	9.7043	9.6990	9.2115	9.2810	9.3282	9.3014	9.5491	9.0233	9.8779
Companies reporting non-GAAP profit												
Mean	9.2562	9.3591	9.4095	9.5179	9.3302	9.3531	9.4210	9.4228	9.3650	9.3790	9.4505	9.4295
Standard Deviation	0.7118	0.7207	0.5941	0.5495	0.6001	0.6640	0.5847	0.5484	0.6291	0.6228	0.5775	0.6060
1st Quartile	8.8403	9.0385	8.9694	9.1656	9.0420	8.9407	9.0000	8.9802	8.9825	8.9570	9.0332	8.9730
Median	9.1257	9.3280	9.2620	9.4168	9.2505	9.3359	9.3992	9.3617	9.2874	9.2778	9.3402	9.3134
3rd Quartile	9.7894	9.8164	9.8178	9.8693	9.7257	9.7166	9.7368	9.7268	9.7179	9.7606	9.8337	9.8362
All companies												
Mean	8.8734	8.9988	9.1232	9.2749	9.1461	9.1318	9.2356	9.2889	9.2861	9.3515	9.4225	9.4233
Standard Deviation	0.8881	0.8672	0.8052	0.7860	0.8165	0.7998	0.7055	0.6242	0.6063	0.6010	0.5722	0.6032
1st Quartile	8.3943	8.5523	8.6619	8.8449	8.7036	8.6814	8.8347	8.9188	8.8921	8.9048	9.0092	8.9503
Median	8.9838	9.1068	9.1832	9.3425	9.1954	9.1267	9.1994	9.2258	9.1712	9.2310	9.2968	9.3095
3rd Quartile	9.4793	9.5888	9.6823	9.8396	9.7119	9.6574	9.6275	9.6642	9.6567	9.6906	9.7894	9.8377
Panel B: OWN (ownership concentration = percentage shares owned by top twenty shareholder)												
Companies not reporting non-GAAP profit												
Mean	61.47	60.55	65.32	65.51	68.61	68.80	67.69	68.64	73.73	75.11	77.42	75.78
Standard Deviation	16.68	16.19	17.37	16.76	14.75	13.71	14.15	14.01	12.26	13.64	10.00	12.61
1st Quartile	52.09	48.71	56.50	56.00	57.04	59.57	59.06	57.50	64.48	67.57	71.49	69.87
Median	60.74	61.04	67.82	67.01	72.00	69.51	69.03	70.31	76.12	78.57	79.48	77.65
3rd Quartile	72.86	72.15	78.93	77.29	79.92	80.55	77.85	79.91	82.70	85.47	84.67	86.32
Companies reporting non-GAAP profit												
Mean	62.38	62.73	60.08	62.87	62.55	64.64	68.04	70.21	69.56	69.87	71.87	72.82
Standard Deviation	19.17	18.70	17.05	17.93	17.31	15.64	14.75	14.34	14.18	13.83	14.11	14.36
1st Quartile	46.82	44.32	49.66	50.41	49.66	51.84	57.02	59.50	58.38	59.91	60.63	61.37
Median	63.99	67.46	59.64	61.84	62.48	65.29	68.78	70.91	71.10	71.20	73.59	75.43
3rd Quartile	79.70	79.17	75.26	77.32	79.39	77.72	80.24	82.21	81.19	82.29	83.85	84.75
All companies												
Mean	61.89	61.61	62.58	64.13	65.05	66.17	67.92	69.68	70.86	71.31	72.94	73.44
Standard Deviation	17.79	17.41	17.32	17.35	16.51	15.03	14.48	14.18	13.69	13.91	13.56	14.00
1st Quartile	48.47	48.38	50.78	53.21	52.71	56.18	57.53	58.95	59.67	62.05	63.60	63.63
Median	62.30	62.18	62.63	64.73	65.27	66.85	68.78	70.45	72.92	74.39	74.95	76.54
3rd Quartile	75.55	75.46	76.03	77.28	79.76	79.34	80.04	81.44	82.20	82.91	84.07	85.18

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Panel C: LEV (leverage = total liabilities to total assets)												
Companies not reporting non-GAAP profit												
Mean	0.4186	0.4468	0.4549	0.4703	0.4310	0.4202	0.4374	0.4220	0.4126	0.4173	0.3954	0.4112
Standard Deviation	0.2137	0.2321	0.2148	0.2258	0.2481	0.2458	0.2287	0.2000	0.2264	0.1872	0.2160	0.1979
1st Quartile	0.2570	0.2970	0.2881	0.3204	0.2056	0.2039	0.2519	0.2868	0.2066	0.2752	0.2209	0.2821
Median	0.4652	0.4629	0.5069	0.4857	0.4745	0.4034	0.4271	0.4360	0.3886	0.3814	0.3390	0.3721
3rd Quartile	0.5592	0.6022	0.6124	0.6330	0.6241	0.6385	0.6102	0.5474	0.5824	0.5690	0.5861	0.5747
Companies reporting non-GAAP profit												
Mean	0.5551	0.5563	0.6280	0.6097	0.5994	0.5453	0.5251	0.5273	0.5405	0.5389	0.5173	0.5242
Standard Deviation	0.2101	0.2100	0.2079	0.2057	0.1990	0.2222	0.2253	0.2199	0.2051	0.1992	0.1927	0.2014
1st Quartile	0.3911	0.4246	0.4536	0.4576	0.4618	0.3945	0.3706	0.3881	0.4259	0.4175	0.3850	0.3965
Median	0.5188	0.5212	0.6157	0.5780	0.5682	0.4957	0.4761	0.4983	0.5241	0.5134	0.4905	0.4989
3rd Quartile	0.6803	0.6661	0.7783	0.7904	0.7542	0.7052	0.6874	0.6673	0.6693	0.6503	0.5935	0.6410
All companies												
Mean	0.4818	0.5000	0.5454	0.5432	0.5299	0.4994	0.4945	0.4916	0.5006	0.5055	0.4938	0.5004
Standard Deviation	0.2219	0.2274	0.2275	0.2256	0.2348	0.2378	0.2293	0.2182	0.2192	0.2026	0.2022	0.2050
1st Quartile	0.3428	0.3497	0.3950	0.3913	0.3918	0.3396	0.3488	0.3484	0.3661	0.3840	0.3576	0.3657
Median	0.4806	0.5021	0.5563	0.5477	0.5344	0.4780	0.4693	0.4660	0.4763	0.4711	0.4643	0.4803
3rd Quartile	0.6083	0.6378	0.6819	0.6842	0.6925	0.6740	0.6574	0.6252	0.6222	0.6096	0.5899	0.6046
Panel D: BAD (bad news firm = decrease in GAAP profit or GAAP loss, good news firm = same or increase in profit)												
Companies not reporting non-GAAP profit												
Bad News Companies n (%)	19 (32)	17 (30)	17 (33)	21 (40)	21 (47)	19 (48)	12 (32)	12 (32)	13 (38)	7 (23)	8 (38)	6 (26)
Good News Companies n (%)	40 (68)	39 (70)	35 (67)	31 (60)	24 (53)	21 (52)	26 (68)	25 (68)	21 (62)	23 (77)	13 (62)	17 (74)
Total n (%)	59 (100)	56 (100)	52 (100)	52 (100)	45 (100)	40 (100)	38 (100)	37 (100)	34 (100)	30 (100)	21 (100)	23 (100)
Companies reporting non-GAAP profit												
Bad News Companies n (%)	6 (12)	17 (32)	17 (30)	13 (23)	35 (55)	45 (65)	13 (18)	36 (50)	43 (57)	35 (44)	31 (35)	38 (44)
Good News Companies n (%)	44 (88)	36 (68)	40 (70)	44 (77)	29 (45)	24 (35)	58 (82)	36 (50)	32 (43)	44 (56)	57 (65)	48 (56)
All companies												
Bad News Companies n (%)	25 (23)	34 (31)	34 (31)	34 (31)	56 (51)	64 (59)	25 (23)	48 (44)	56 (51)	42 (39)	39 (36)	44 (40)
Good News Companies n (%)	84 (77)	75 (69)	75 (69)	75 (69)	53 (49)	45 (41)	84 (77)	61 (56)	53 (49)	67 (61)	70 (64)	65 (60)
Total n (%)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)	109 (100)

Appendix 8 - Univariate t-test results for independent variables for Research Question 1

	Size (log of market capitalisation)	**Own Concentration** (% owned by top 20)	**Leverage** (total liabilities/total assets)
Predicted direction	+	-	+
2004			
Non-GAAP Profit Reported	9.2562	62.3846%	55.5135%
No non-GAAP Profit	8.5490	61.4708%	41.8618%
Difference	.70718	0.91375%	13.65170%
	t (107) = 4.496, p = **0.000****	t (107) = 0.266, p = 0.396	t (106) = 3.335, p = **0.000****
2005			
Non-GAAP Profit Reported	9.3591	62.7309%	55.6367%
No non-GAAP Profit	8.6579	60.5588%	44.6824%
Difference	.70122	2.17219%	10.95424%
	t (107) = 4.596, p = **0.000****	t (107) = 0.649, p = 0.259	t (107) = 2.578, p = **0.006****
2006			
Non-GAAP Profit Reported	9.4095	60.0858%	62.8008%
No non-GAAP Profit	8.8094	65.3244%	45.4901%
Difference	.60003	-5.23863%	17.31073%
	t (87.6) = 4.097, p = **0.000****	t (107) = 1.588, p = 0.058	t (107) = 4.272, p = **0.000****
2007			
Non-GAAP Profit Reported	9.5179	62.8760%	60.9765%
No non-GAAP Profit	9.0086	65.5119%	47.0331%
Difference	.50925	-2.63596%	13.94340%
	t (82.5) = 3.506, p = **0.000****	t (107) = -0.791, p = 0.216	t (107) = 3.373, p = **0.000****
2008			
Non-GAAP Profit Reported	9.3302	62.5520%	59.9473%
No non-GAAP Profit	8.8844	68.6196%	43.1084%
Difference	.44579	-6.06752%	16.83883%
	t (66.1) = 2.670, p = **0.005****	t (107) = -1.912, p = **0.030***	t (107) = 3.924, p = **0.000****
2009			
Non-GAAP Profit Reported	9.3531	64.6496%	54.5324%
No non-GAAP Profit	8.7502	68.8017%	42.0272%
Difference	.60280	-4.15218%	12.50517%
	t (107) = 4.054, p = **0.000****	t (107) = -1.396, p = 0.083	t (107) = 2.723, p = **0.004****
2010			
Non-GAAP Profit Reported	9.4210	68.0428%	52.5117%
No non-GAAP Profit	8.8893	67.6929%	43.7422%
Difference	.53174	0.34992%	8.76943%
	t (107) = 4.002, p = **0.000****	t (107) = 0.120, p = 0.453	t (107) = 1.926, p = **0.029***
2011			
Non-GAAP Profit Reported	9.4228	70.2171%	52.7371%
No non-GAAP Profit	9.0283	68.6400%	42.2084%
Difference	.39443	1.57708%	10.52867%
	t (107) = 3.260, p = **0.000****	t (107) = 0.548, p = 0.293	t (107) = 2.438, p = **0.008****
2012			
Non-GAAP Profit Reported	9.3650	69.5605%	54.0537%
No non-GAAP Profit	9.1120	73.7324%	41.2658%
Difference	-.25293	-4.17182%	12.78782%
	t (107) = 2.047, p = **0.022***	t (107) = -1.482, p = 0.071	t (107) = 2.918, p = **0.002****
2013			
Non-GAAP Profit Reported	9.3790	69.8767%	53.8982%
No non-GAAP Profit	9.2790	75.1180%	41.7345%
Difference	.09997	-5.24129%	12.16369%
	t (107) = 0.774, p = 0.220	t (107) = -1.774, p = **0.040***	t (107) = 2.892, p = **0.003****
2014			
Non-GAAP Profit Reported	9.4505	71.8708%	51.7353%
No non-GAAP Profit	9.3053	77.4262%	39.5429%
Difference	.14521	-5.55540%	12.19240%
	t (107) = 1.045, p = 0.149	t (41.4) = -2.095, p = **0.021***	t (107) = 2.544, p = **0.006****
2015			
Non-GAAP Profit Reported	9.4295	72.8241%	52.4253%
No non-GAAP Profit	9.3998	75.7843%	41.1217%
Difference	.02976	-2.96028%	11.30363%
	t (107) = 0.209, p = 0.418	t (107) = -0.899, p = 0.185	t (107) = 2.399, p = **0.009****

NOTE: Where the Levene's Test was significant ($p \leq 0.05$), the results for 'equal variances not assumed' have been reported. Reported p values are one-tailed for variables with a directional prediction and two-tailed otherwise.

* Significant at the 0.05 level

** Significant at the 0.01 level

Appendix 9 - Pearson Correlation Matrix of Independent Variables for Research Question 1

	Size (Log Market Cap)	Ownership Concentration	Leverage
Panel A: Total Sample			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.023	1.00	
Leverage	**0.500****	**-0.219****	1.00
Panel B: 2004			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.034	1.00	
Leverage	**0.587****	-0.028	1.00
Panel C: 2005			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.022	1.00	
Leverage	**0.611****	-0.059	1.00
Panel D: 2006			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.033	1.00	
Leverage	**0.576****	-0.161	1.00
Panel E: 2007			
Size (Log Market Cap)	1.00		
Ownership Concentration	0.020	1.00	
Leverage	**0.566****	**-0.199***	1.00
Panel F: 2008			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.057	1.00	
Leverage	**0.540****	**-0.251****	1.00
Panel G: 2009			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.055	1.00	
Leverage	**0.426****	**-0.240***	1.00
Panel H: 2010			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.089	1.00	
Leverage	**0.344****	**-0.225***	1.00
Panel I: 2011			
Size (Log Market Cap)	1.00		
Ownership Concentration	-.090	1.00	
Leverage	**0.435****	**-0.290****	1.00
Panel J: 2012			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.163	1.00	
Leverage	**0.466****	**-0.315****	1.00
Panel K: 2013			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.142	1.00	
Leverage	**0.508****	**-0.338****	1.00
Panel L: 2014			
Size (Log Market Cap)	1.00		
Ownership Concentration	**-0.260****	1.00	
Leverage	**0.560****	**-0.350****	1.00
Panel M: 2015			
Size (Log Market Cap)	1.00		
Ownership Concentration	**-0.203***	1.00	
Leverage	**0.540****	**-0.318****	1.00

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Appendix 10 - Outliers eliminated in logistic regression for total sample model – Research Question 1

Company	Industry	Year	Standardised Residual	Cook's Distance	Leverage
Ainsworth Game Technology Limited	Consumer Discretionary	2007	-1.15693	0.01763	**0.01300**
		2008	-0.87389	0.01213	**0.01564**
		2009	-0.86840	0.01430	**0.01861**
		2010	-0.94143	0.01679	**0.01859**
		2006	**-2.23817**	0.01676	0.00333
Bendigo And Adelaide Bank Limited	Financials	2004	0.62713	0.00464	**0.01165**
		2005	0.62047	0.00454	**0.01164**
Bluescope Steel Limited	Materials	2006	**-2.02710**	0.01661	0.00403
Cimic Group Limited	Industrials	2007	**-2.10014**	0.01178	0.00266
		2008	**-2.27640**	0.01417	0.00273
		2015	**-2.26713**	0.01820	0.00353
Credit Corp Group Limited	Financials	2008	1.14570	0.01635	**0.01230**
Cromwell Property Group Stapled	Real Estate	2004	-0.78847	0.00804	**0.01277**
Duet Group Forus	Utilities	2012	**-2.07008**	0.01510	0.00351
Lend Lease Group Stapled	Real Estate	2015	**-2.54966**	0.01741	0.00267
Macquarie Group Limited	Financials	2004	**-2.28221**	0.01724	0.00330
		2005	**-2.38042**	0.01697	0.00299
		2007	**-2.77033**	0.02265	0.00294
		2008	**-2.55522**	0.02123	0.00324
		2009	**-2.88467**	0.02720	0.00326
		2010	**-2.58748**	0.01958	0.00292
		2011	**-3.15482**	0.02875	0.00288
		2012	**-3.00019**	0.02721	0.00301
		2013	**-2.45479**	0.01907	0.00315
		2014	**-2.64451**	0.02133	0.00304
		2015	**-2.81247**	0.02347	0.00296
Qantas Airways Limited	Industrials	2006	**-2.28273**	0.01363	0.00261
		2007	**-2.03887**	0.01084	0.00260
		2009	**-2.24334**	0.01505	0.00298
Regis Resources Limited	Materials	2005	**2.18693**	0.02383	0.00496
Santos Limited	Energy	2007	**-2.15901**	0.01442	0.00308
Senex Energy Limited	Energy	2004	-0.49640	0.00348	**0.01393**
		2005	-0.52989	0.00413	**0.01451**
		2006	-0.57870	0.00515	**0.01513**
		2007	-0.57709	0.00486	**0.01440**
Suncorp Group Limited	Financials	2008	**-2.97532**	0.02795	0.00315
		2009	**-2.78489**	0.02263	0.00291
Telstra Corporation Limited	Telecommunication Services	2004	**-2.46334**	0.03449	0.00565
		2006	**-2.47811**	0.02917	0.00473
		2007	**-2.70881**	0.02259	0.00307
		2008	**-2.65799**	0.02171	0.00306
		2009	**-2.55465**	0.01989	0.00304
		2010	**-3.18471**	0.03088	0.00304
		2011	**-3.12959**	0.02987	0.00304
		2012	**-2.62809**	0.02240	0.00323
		2013	**-2.67113**	0.02558	0.00357
		2014	**-2.66855**	0.02726	0.00381
		2015	**-2.73099**	0.02962	0.00396
Transurban Group Stapled	Industrials	2006	**-2.24239**	0.01303	0.00258
		2007	**-2.37719**	0.01450	0.00256
		2008	**-2.11300**	0.01095	0.00245
		2009	**-2.15573**	0.01217	0.00261
		2012	**-2.38264**	0.01575	0.00277
Vocus Communications Limited	Telecommunication Services	2010	-0.72558	0.00778	**0.01456**
Wesfarmers Limited	Consumer Staples	2007	**-2.75979**	0.03769	0.00492
		2008	**-2.02070**	0.02016	0.00491
		2013	**-2.00770**	0.02484	0.00613
		2015	**-2.56686**	0.04106	0.00619

Company	Industry	Year	Standardised Residual	Cook's Distance	Leverage
Westfield Corporation Stapled	Real Estate	2005	**-2.20118**	0.01561	0.00321
		2006	**-2.22099**	0.01756	0.00355
		2007	**-2.72979**	0.03044	0.00407
		2008	**-2.71224**	0.02368	0.00321
Woolworths Limited	Consumer Staples	2005	**-2.27235**	0.01783	0.00344
		2006	**-2.27203**	0.01765	0.00341
		2007	**-2.29538**	0.02017	0.00381
		2008	**-2.22749**	0.01930	0.00387
		2009	**-2.23508**	0.02053	0.00409
		2010	**-2.22876**	0.02139	0.00429
		2011	**-2.32426**	0.02178	0.00402
Worleyparsons Limited	Energy	2013	**-2.01771**	0.01033	0.00253

Appendix 11 - Outliers eliminated in logistic regression for individual years – Research Question 1

Year	Company	Industry	Standardised Residual	Cook's Distance	Leverage
2004	Bendigo and Adelaide Bank Limited	Financials	0.78055	0.1045	**0.14641**
	Macquarie Group Limited	Financials	**-2.12260**	0.21433	0.04541
	Telstra Corporation Limited	Telecommunication Services	**-2.24744**	0.33212	0.06170
2005	Bendigo and Adelaide Bank Limited	Financials	1.20387	0.23323	**0.13862**
	Regis Resources Limited	Materials	**2.71537**	0.27886	0.03644
	Westfield Corporation Stapled	Real Estate	**-2.30572**	0.22548	0.04069
2006	Senex Energy Limited	Energy	-0.53893	0.05277	**0.15376**
	Telstra Corporation Limited	Telecommunication Services	**-2.59900**	0.34362	0.04841
	Woolworths Limited	Consumer Staples	**-2.27492**	0.19943	0.03711
2007	Ainsworth Game Technology Limited	Consumer Discretionary	-0.63091	0.07067	**0.15077**
	Macquarie Group Limited	Financials	**-2.31297**	0.19644	0.03542
	Telstra Corporation Limited	Telecommunication Services	**-1.98504**	0.18633	0.04515
	Woolworths Limited	Consumer Staples	**-2.00969**	0.19084	0.04512
2008	Ainsworth Game Technology Limited	Consumer Discretionary	-1.11931	0.23305	**0.15684**
	Macquarie Group Limited	Financials	**-2.53971**	0.22693	0.03399
	Suncorp Group Limited	Financials	**-3.23231**	0.29791	0.02772
2009	Ainsworth Game Technology Limited	Consumer Discretionary	-0.60649	0.06389	**0.14800**
	Duet Group Forus	Utilities	**-2.03552**	0.15809	0.03675
	Macquarie Group Limited	Financials	**-3.63481**	0.37264	0.02743
	Qantas Airways Limited	Industrials	**-2.21611**	0.16516	0.03254
	Suncorp Group Limited	Financials	**-3.42804**	0.30463	0.02527
	Telstra Corporation Limited	Telecommunication Services	**-2.88438**	0.32489	0.03758
	Transurban Group Stapled	Industrials	**-2.28379**	0.13993	0.02613
	Woolworths Limited	Consumer Staples	**-2.86512**	0.34674	0.04053
2010	Ainsworth Game Technology Limited	Consumer Discretionary	-0.51054	0.04919	**0.15876**
	Cimic Group Limited	Industrials	**-2.55304**	0.15922	0.02385
	Macquarie Group Limited	Financials	**-3.13910**	0.31605	0.03108
	Telstra Corporation Limited	Telecommunication Services	**-2.94336**	0.49630	0.05418
	Transurban Group Stapled	Industrials	**-2.22821**	0.10948	0.02157
	Woolworths Limited	Consumer Staples	**-3.11933**	0.36324	0.03599
2011	Macquarie Group Limited	Financials	**-4.90729**	0.60085	0.02434
	Mcmillan Shakespeare Limited	Industrials	**-2.02992**	0.20252	0.04685
	Telstra Corporation Limited	Telecommunication Services	**-4.45452**	0.54342	0.02666
	Transurban Group Stapled	Industrials	**-1.99305**	0.12269	0.02996
	Woolworths Limited	Consumer Staples	**-2.20110**	0.35416	0.06812
2012	Duet Group Forus	Utilities	**-2.51586**	0.19077	0.02926
	JB Hi-fi Limited	Consumer Discretionary	**-2.28729**	0.18729	0.03456
	Macquarie Group Limited	Financials	**-3.48774**	0.35287	0.02819
	Sandfire Resources NL	Materials	**-2.09765**	0.21898	0.04741
	Tabcorp Holdings Limited	Consumer Discretionary	**-2.07706**	0.08580	0.01950
	Telstra Corporation Limited	Telecommunication Services	**-2.64322**	0.43994	0.05924
	Transurban Group Stapled	Industrials	**-2.45126**	0.19760	0.03184
	Western Areas Limited	Materials	**-1.96244**	0.11141	0.02812
2013	Adelaide Brighton Limited	Materials	**-2.07844**	0.16725	0.03727
	Aust Agricultural Company Limited	Consumer Staples	**-2.65856**	0.28080	0.03821
	JB Hi-fi Limited	Consumer Discretionary	**-2.10253**	0.15788	0.03448
	Karoon Gas Australia Limited	Energy	**-2.16869**	0.15337	0.03158
	Macquarie Group Limited	Financials	**-2.75162**	0.35442	0.04472
	Monadelphous Group Limited	Industrials	**-2.49997**	0.36355	0.05497
	Wesfarmers Limited	Consumer Staples	-1.06905	0.24376	**0.17579**
	Worleyparsons Limited	Energy	**-2.71183**	0.18555	0.02461
2014	Cardno Limited	Industrials	**-2.38852**	0.20543	0.03476
	JB Hi-fi Limited	Consumer Discretionary	**-3.00014**	0.24570	0.02657
	Karoon Gas Australia Limited	Energy	-1.11320	0.20372	**0.14118**
	Lend Lease Group Stapled	Real Estate	**-2.96755**	0.23884	0.02641
	Macquarie Group Limited	Financials	**-4.41321**	0.67512	0.03350
	Mcmillan Shakespeare Limited	Industrials	**-2.79124**	0.30355	0.03750
	Telstra Corporation Limited	Telecommunication Services	**-3.27848**	0.81406	0.07041
	Transurban Group Stapled	Industrials	**-2.33680**	0.22491	0.03956
	Wesfarmers Limited	Consumer Staples	0.49989	0.05555	**0.18188**

Year	Company	Industry	Standardised Residual	Cook's Distance	Leverage
	Breville Group Limited	Consumer Discretionary	**-2.12566**	0.19145	0.04065
	Cimic Group Limited	Industrials	**-2.42920**	0.32220	0.05177
	Cochlear Limited	Health Care	**-2.05077**	0.09177	0.02135
	Downer Edi Limited	Industrials	**-2.42919**	0.21288	0.03482
2015	JB Hi-fi Limited	Consumer Discretionary	**-2.34396**	0.16264	0.02875
	Lend Lease Group Stapled	Real Estate	**-3.23595**	0.29583	0.02748
	Macquarie Group Limited	Financials	**-3.10530**	0.46246	0.04576
	Sandfire Resources NL	Materials	**-2.30800**	0.21804	0.03932
	Wesfarmers Limited	Consumer Staples	-1.58314	0.71695	**0.22243**

Appendix 12 - Descriptive statistics for independent variables for Research Question 3

Statistic	2004 n=50	2005 n=53	2006 n=57	2007 n=57	2008 n=64	2009 n=69	2010 n=71	2011 n=72	2012 n=75	2013 n=79	2014 n=88	2015 n=86
Panel A: SIZE (log of market capitalisation)												
Mean	9.2562	9.3591	9.4095	9.5179	9.3302	9.3531	9.4210	9.4228	9.3650	9.3790	9.4505	9.4295
Standard Deviation	0.7118	0.7207	0.5941	0.5495	0.6001	0.6640	0.5847	0.5484	0.6291	0.6228	0.5775	0.6060
1st Quartile	8.8403	9.0385	8.9694	9.1656	9.0420	8.9407	9.0000	8.9802	8.9825	8.9570	9.0332	8.9730
Median	9.1257	9.3280	9.2620	9.4168	9.2505	9.3359	9.3992	9.3617	9.2874	9.2778	9.3402	9.3134
3rd Quartile	9.7894	9.8164	9.8178	9.8693	9.7257	9.7166	9.7368	9.7268	9.7179	9.7606	9.8337	9.8362
Panel B: OWN (ownership concentration = percentage shares owned by top twenty shareholder)												
Mean	62.38	62.73	60.08	62.87	62.55	64.64	68.04	70.21	69.56	69.87	71.87	72.82
Standard Deviation	19.17	18.70	17.05	17.93	17.31	15.64	14.75	14.34	14.18	13.83	14.11	14.36
1st Quartile	46.82	44.32	49.66	50.41	49.66	51.84	57.02	59.50	58.38	59.91	60.63	61.37
Median	63.99	67.46	59.64	61.84	62.48	65.29	68.78	70.91	71.10	71.20	73.59	75.43
3rd Quartile	79.70	79.17	75.26	77.32	79.39	77.72	80.24	82.21	81.19	82.29	83.85	84.75
Panel C: LEV (leverage = total liabilities to total assets)												
Mean	0.5551	0.5563	0.6280	0.6097	0.5994	0.5453	0.5251	0.5273	0.5405	0.5389	0.5173	0.5242
Standard Deviation	0.2101	0.2100	0.2079	0.2057	0.1990	0.2222	0.2253	0.2199	0.2051	0.1992	0.1927	0.2014
1st Quartile	0.3911	0.4246	0.4536	0.4576	0.4618	0.3945	0.3706	0.3881	0.4259	0.4175	0.3850	0.3965
Median	0.5188	0.5212	0.6157	0.5780	0.5682	0.4957	0.4761	0.4983	0.5241	0.5134	0.4905	0.4989
3rd Quartile	0.6803	0.6661	0.7783	0.7904	0.7542	0.7052	0.6874	0.6673	0.6693	0.6503	0.5935	0.6410
Panel D: BAD (bad news firm = decrease in GAAP profit or GAAP loss, good news firm = same or increase in profit)												
Bad News Companies n (%)	6 (12)	17 (32)	17 (30)	13 (23)	35 (55)	45 (65)	13 (18)	36 (50)	43 (57)	35 (44)	31 (35)	38 (44)
Good News Companies n (%)	44 (88)	36 (68)	40 (70)	44 (77)	29 (45)	24 (35)	58 (82)	36 (50)	32 (43)	44 (56)	57 (65)	48 (56)
Total n (%)	50 (100)	53 (100)	57 (100)	57 (100)	64 (100)	69 (100)	71 (100)	72 (100)	75 (100)	79 (100)	88 (100)	86 (100)

Appendix 13 - Descriptive statistics for dependent variables for Research Questions 3 and 4

Statistic	2004 n=50	2005 n=53	2006 n=57	2007 n=57	2008 n=64	2009 n=69	2010 n=71	2011 n=72	2012 n=75	2013 n=79	2014 n=88	2015 n=86
IM (Impression Management relative emphasis measure = emphasis score for non-GAAP – emphasis score for GAAP)												
Panel A: ***Press Release Relative Emphasis***												
Mean	1.000	0.368	0.974	0.386	1.531	1.109	0.697	0.028	-0.300	-0.335	-0.489	0.134
Standard Deviation	3.6309	4.3036	3.7302	4.8200	3.9670	4.1665	4.2084	2.8133	2.5121	2.9218	3.2154	3.3698
1st Quartile	-0.625	-2.500	-0.750	-2.750	-0.500	-0.750	-1.000	-1.000	-1.500	-0.500	-1.500	-1.500
Median	0.500	0.000	0.500	0.500	1.500	0.500	0.500	0.000	-0.500	-0.500	-0.500	-0.250
3rd Quartile	3.000	2.750	2.500	3.000	4.000	4.000	3.000	0.500	1.500	0.500	1.000	2.000
Panel B: ***Annual Report Relative Emphasis***												
Mean	0.420	-0.358	1.009	0.895	1.508	0.507	0.669	0.299	0.200	0.032	0.080	0.221
Standard Deviation	4.9357	4.7184	4.4806	4.4035	4.2337	4.1749	4.3136	3.6189	3.5641	3.1758	4.0626	3.7050
1st Quartile	-3.375	-3.500	-2.500	-1.250	-1.875	-1.500	-2.000	-1.500	-1.500	-1.500	-1.500	-1.500
Median	1.250	-1.500	1.000	1.000	1.000	0.500	0.500	0.000	0.000	0.000	0.000	0.500
3rd Quartile	4.625	3.250	4.250	3.750	5.000	3.250	3.500	2.000	2.000	2.000	3.375	2.000
Panel C: ***Total Relative Emphasis***												
Mean	1.420	0.009	1.982	1.281	3.039	1.616	1.366	0.326	-0.100	-0.304	-0.409	0.355
Standard Deviation	7.3202	8.2826	7.2407	8.1837	7.1048	7.5800	7.7418	5.3970	5.1386	5.2984	6.5524	5.8566
1st Quartile	-5.625	-6.000	-3.000	-4.250	-0.375	-2.500	-3.000	-2.875	-3.500	-3.000	-3.000	-2.500
Median	1.000	-1.500	1.500	1.000	3.250	2.000	1.500	0.500	-0.500	0.000	0.000	0.500
3rd Quartile	7.500	6.250	7.500	8.000	7.375	6.500	5.000	3.000	3.000	3.000	3.000	3.625

Appendix 14 - Outliers eliminated in multiple regression for total sample model – Research Question 3

Company	Industry	Year	Standardised Residual	Cook's Distance	Leverage
Panel A: Relative Emphasis of Press Release					
AMP Limited	Financials	2010	**2.03529**	0.00564	0.0055
APA Group Stapled	Utilities	2010	**-2.18949**	0.00565	0.0046
APN News & Media Limited	Consumer Discretionary	2004	**2.08269**	0.00246	0.00161
		2007	**2.04228**	0.00279	0.00211
		2008	**2.26012**	0.00454	0.00318
		2009	**2.02789**	0.0028	0.00216
		2010	**2.03212**	0.00348	0.00295
Arrium Limited	Materials	2006	**2.02274**	0.00251	0.00183
ANZ Banking Group Limited	Financials	2007	**-2.68239**	0.01292	0.0076
Aveo Group Stapled	Real Estate	2009	**1.971**	0.00927	0.01044
AWE Limited	Energy	2009	**-1.97291**	0.00604	0.00642
		2014	**-2.95543**	0.00963	0.00423
Bank of Queensland Limited	Financials	2009	**2.11721**	0.00674	0.00619
		2010	**2.7999**	0.01168	0.00613
Bendigo And Adelaide Bank Ltd	Financials	2008	**-2.26591**	0.01244	0.01061
Boral Limited	Materials	2005	**-2.06594**	0.00213	0.00127
Caltex Australia Limited	Energy	2005	**2.63577**	0.00572	0.00287
		2006	**2.24008**	0.00595	0.00464
		2007	**3.46124**	0.00958	0.00275
		2008	**2.58825**	0.00521	0.00264
Commonwealth Bank of Australia	Financials	2007	**2.67525**	0.0155	0.00938
Credit Corp Group Limited	Financials	2008	-0.44053	0.00082	**0.01917**
Cromwell Property Group Stapled	Real Estate	2014	**2.0257**	0.00196	0.00116
CSR Limited	Materials	2005	**2.31311**	0.00289	0.00147
		2006	**1.99482**	0.00181	0.00105
Downer Edi Limited	Industrials	2005	**-3.10236**	0.00703	0.00241
		2007	**-2.95507**	0.00616	0.00228
		2008	**-2.95387**	0.00635	0.0024
		2009	**-2.95412**	0.00691	0.00271
Drillsearch Energy Limited	Energy	2013	**-2.94059**	0.01182	0.00553
Fairfax Media Limited	Consumer Discretionary	2004	**2.64024**	0.00414	0.00174
		2008	**-2.14482**	0.00317	0.0022
GPT Group Stapled	Real Estate	2013	**-2.08268**	0.0069	0.00662
Graincorp Limited	Consumer Staples	2006	**2.19647**	0.00802	0.00695
GUD Holdings Limited	Consumer Discretionary	2006	**-2.15117**	0.00884	0.00815
Harvey Norman Holdings Limited	Consumer Discretionary	2010	**1.95863**	0.00362	0.00346
		2015	**-2.2745**	0.00641	0.0049
Iluka Resources Limited	Materials	2007	**-2.15071**	0.0036	0.00264
		2009	**-2.08832**	0.00398	0.00331
		2010	**-2.83998**	0.00701	0.00309
Insurance Australia Group Limited	Financials	2006	**-2.01866**	0.00608	0.00613
Monadelphous Group Limited	Industrials	2014	**-1.98077**	0.00519	0.00531
National Australia Bank Limited	Financials	2007	**1.98466**	0.0076	0.00825
Northern Star Resources LTD	Materials	2015	**2.99147**	0.00467	0.00138
Orica Limited	Materials	2014	**-2.4404**	0.00376	0.00192
Pacific Brands Limited	Consumer Discretionary	2004	**2.47463**	0.00553	0.00325
Qantas Airways Limited	Industrials	2015	**2.23148**	0.00666	0.00538
Santos Limited	Energy	2013	**-2.00618**	0.00522	0.00519
Sonic Healthcare Limited	Health Care	2009	**2.35276**	0.00454	0.00285
Suncorp Group Limited	Financials	2004	**-2.48273**	0.00989	0.00668
		2005	**-2.05198**	0.00625	0.00609
		2007	**-2.41947**	0.00687	0.00458

Company	Industry	Year	Standardised Residual	Cook's Distance	Leverage
Tabcorp Holdings Limited	Consumer Discretionary	2005	**2.64136**	0.00597	0.00303
Tassal Group Limited	Consumer Staples	2008	**2.30778**	0.00677	0.00506
UGL Limited	Industrials	2010	**2.15139**	0.00285	0.00184
Village Roadshow Limited	Consumer Discretionary	2007	**-1.99569**	0.01099	0.01222
Woolworths Limited	Consumer Staples	2004	**2.16633**	0.00495	0.004
Panel B: Relative Emphasis of Annual Report					
Adelaide Brighton Limited	Materials	2007	**-2.2684**	0.00298	0.00166
APA Group Stapled	Utilities	2004	**1.98287**	0.00437	0.00427
APN News & Media Limited	Consumer Discretionary	2004	**-2.88833**	0.00474	0.00161
ASX Limited	Financials	2014	**-2.77548**	0.00457	0.00173
ANZ Banking Group Limited	Financials	2007	**-2.64638**	0.01257	0.0076
Aveo Group Stapled	Real Estate	2006	**-2.17366**	0.00412	0.00311
		2014	**2.27219**	0.00522	0.00379
AWE Limited	Energy	2009	**-2.9785**	0.01376	0.00642
Bank of Queensland Limited	Financials	2004	**-2.4378**	0.01392	0.01022
		2005	**-2.68597**	0.01678	0.01015
		2009	**2.47962**	0.00924	0.00619
		2010	**2.36075**	0.00831	0.00613
Boral Limited	Materials	2010	**2.1715**	0.0033	0.00226
Cabcharge Australia Limited	Industrials	2015	**-3.09224**	0.01006	0.00399
Caltex Australia Limited	Energy	2007	**2.02849**	0.00329	0.00275
Cimic Group Limited	Industrials	2011	**-2.33919**	0.00608	0.00427
Credit Corp Group Limited	Financials	2008	1.1594	0.00571	**0.01917**
		2009	**2.09771**	0.01411	0.01432
		2014	**2.36331**	0.0063	0.00436
Drillsearch Energy Limited	Energy	2014	**-2.52164**	0.00472	0.00247
Iluka Resources Limited	Materials	2008	**-2.38601**	0.00397	0.00225
		2009	**-2.46024**	0.00553	0.00331
Insurance Australia Group Limited	Financials	2010	**-1.99861**	0.0042	0.00398
		2011	**-2.04177**	0.00313	0.00251
Mcmillan Shakespeare Limited	Industrials	2015	**-2.14927**	0.00351	0.00255
Monadelphous Group Limited	Industrials	2012	**-2.67397**	0.00653	0.0033
		2014	**-2.50907**	0.00832	0.00531
National Australia Bank Limited	Financials	2006	**-2.52999**	0.012	0.00799
Pacific Brands Limited	Consumer Discretionary	2005	**2.00205**	0.00279	0.00224
Qantas Airways Limited	Industrials	2010	**2.19713**	0.00552	0.00443
		2014	**2.07234**	0.00688	0.00667
Ramsay Health Care Limited	Health Care	2006	**2.02089**	0.00295	0.00237
		2010	**2.38581**	0.00346	0.0018
		2011	**2.26544**	0.00302	0.0017
Regis Resources Limited	Materials	2015	**-2.27498**	0.00628	0.00477
Santos Limited	Energy	2005	**-2.65874**	0.0053	0.0025
Select Harvests Limited	Consumer Staples	2014	**-2.24479**	0.00558	0.00425
Senex Energy Limited	Energy	2013	**-2.29874**	0.01029	0.00833
Sigma Pharmaceuticals Limited	Health Care	2008	**2.13811**	0.00902	0.00845
Stockland Stapled	Real Estate	2006	**2.01426**	0.00491	0.00476
		2007	**2.51073**	0.00689	0.00419
		2008	**2.06708**	0.00491	0.00447
Suncorp Group Limited	Financials	2010	**-2.03026**	0.00399	0.00357
		2015	**-3.13109**	0.01075	0.00421
Tabcorp Holdings Limited	Consumer Discretionary	2006	**2.11914**	0.00376	0.00293
UGL Limited	Industrials	2008	**2.00093**	0.0018	0.00102
Wesfarmers Limited	Consumer Staples	2009	**-2.29696**	0.01162	0.00956
		2014	**-2.29436**	0.01641	0.0139

Company	Industry	Year	Standardised Residual	Cook's Distance	Leverage
Woolworths Limited	Consumer Staples	2014	**1.99531**	0.00766	0.00822
Panel C: Relative Emphasis Total					
Adelaide Brighton Limited	Materials	2005	**2.15905**	0.00315	0.00214
		2007	**-2.39939**	0.00334	0.00166
ASX Limited	Financials	2014	**-2.62123**	0.00408	0.00173
ANZ Banking Group Limited	Financials	2007	**-3.02997**	0.01648	0.0076
		2008	**-1.98612**	0.00828	0.00906
Aveo Group Stapled	Real Estate	2014	**2.27968**	0.00526	0.00379
AWE Limited	Energy	2009	**-2.84871**	0.01258	0.00642
		2014	**-2.5159**	0.00698	0.00423
Bank of Queensland Limited	Financials	2005	**-2.18839**	0.01114	0.01015
		2009	**2.6264**	0.01037	0.00619
		2010	**2.92141**	0.01272	0.00613
Boral Limited	Materials	2010	**2.2534**	0.00355	0.00226
Cabcharge Australia Limited	Industrials	2015	**-2.4517**	0.00633	0.00399
Caltex Australia Limited	Energy	2005	**2.48706**	0.00509	0.00287
		2006	**2.15604**	0.00551	0.00464
		2007	**3.07674**	0.00757	0.00275
		2008	**2.41138**	0.00452	0.00264
		2010	**1.97665**	0.00312	0.00274
Coca-cola Amatil Limited	Consumer Staples	2008	**1.99568**	0.00494	0.00491
Credit Corp Group Limited	Financials	2008	0.46021	0.0009	**0.01917**
		2014	**2.15007**	0.00522	0.00436
Downer Edi Limited	Industrials	2005	**-2.14427**	0.00336	0.00241
		2007	**-2.06405**	0.003	0.00228
		2008	**-2.21014**	0.00356	0.0024
		2009	**-2.1358**	0.00361	0.00271
Drillsearch Energy Limited	Energy	2013	**-2.59788**	0.00923	0.00553
Fairfax Media Limited	Consumer Discretionary	2004	**2.40731**	0.00344	0.00174
Graincorp Limited	Consumer Staples	2006	**2.28974**	0.00871	0.00695
Iluka Resources Limited	Materials	2008	**-2.40551**	0.00404	0.00225
		2009	**-2.59925**	0.00617	0.00331
		2010	**-2.58682**	0.00582	0.00309
Insurance Australia Group Limited	Financials	2006	**-1.99828**	0.00595	0.00613
Monadelphous Group Limited	Industrials	2014	**-2.57086**	0.00874	0.00531
National Australia Bank Limited	Financials	2006	**-2.29601**	0.00988	0.00799
Northern Star Resources LTD	Materials	2015	**2.07789**	0.00226	0.00138
Pacific Brands Limited	Consumer Discretionary	2005	**2.16459**	0.00326	0.00224
Qantas Airways Limited	Industrials	2010	**2.31061**	0.0061	0.00443
		2015	**2.05083**	0.00562	0.00538
Ramsay Health Care Limited	Health Care	2010	**2.34831**	0.00335	0.0018
		2011	**2.06724**	0.00251	0.0017
REA Group LTD	Information Technology	2015	**1.97355**	0.00759	0.00834
Santos Limited	Energy	2005	**-2.03045**	0.00309	0.0025
Select Harvests Limited	Consumer Staples	2014	**-2.06638**	0.00473	0.00425
Stockland Stapled	Real Estate	2007	**2.22261**	0.0054	0.00419
Suncorp Group Limited	Financials	2004	**-2.27924**	0.00834	0.00668
		2005	**-2.1189**	0.00666	0.00609
		2007	**-2.01337**	0.00476	0.00458
		2010	**-2.16217**	0.00452	0.00357
		2011	**-1.98548**	0.00541	0.00555
		2015	**-2.88612**	0.00913	0.00421
Tabcorp Holdings Limited	Consumer Discretionary	2005	**2.54464**	0.00554	0.00303
UGL Limited	Industrials	2008	**2.13046**	0.00204	0.00102
Wesfarmers Limited	Consumer Staples	2009	**-2.27009**	0.01135	0.00956
		2010	**-2.18646**	0.01148	0.01051

Appendix 15 - Outliers eliminated in multiple regression for individual years – Research Question 3

Year	Relative Emphasis of:	Company	Industry	Standardised Residual	Cook's Distance	Leverage
2004	Press Release	Fairfax Media Limited	Consumer Discretionary	**2.02152**	0.04547	0.03019
		Oz Minerals Limited	Materials	**-2.03005**	0.29516	0.19863
		Pacific Brands Limited	Consumer Discretionary	**1.99728**	0.22945	0.16910
		Suncorp Group Limited	Financials	**-2.25806**	0.12597	0.08005
	Annual Report	APA Group Stapled	Utilities	**1.97223**	0.04328	0.03019
		APN News & Media Limited	Consumer Discretionary	**-2.90168**	0.08150	0.02421
	Total	Woolworths Limited	Consumer Staples	**2.01230**	0.05931	0.04414
2005	Press Release	Downer Edi Limited	Industrials	**-2.58476**	0.08550	0.03804
	Annual Report	Charter Hall Retail Reit Unit	Real Estate	**-1.97399**	0.10522	0.08867
		Santos Limited	Energy	**-2.18422**	0.04787	0.02682
	Total	Tabcorp Holdings Limited	Consumer Discretionary	**1.97199**	0.04718	0.03539
2006	Press Release	Graincorp Limited	Consumer Staples	**1.98980**	0.07696	0.06437
		GUD Holdings Limited	Consumer Discretionary	**-2.19853**	0.10745	0.07415
		Insurance Australia Group Limited	Financials	**-2.23061**	0.12421	0.08336
	Annual Report	Aveo Group Stapled	Real Estate	**-2.05705**	0.04172	0.02742
		National Australia Bank Limited	Financials	**-2.05815**	0.13458	0.10481
	Total	Insurance Australia Group Limited	Financials	**-2.03042**	0.10292	0.08336
		National Australia Bank Limited	Financials	**-2.03135**	0.13109	0.10481
2007	Press Release	ANZ Banking Group Limited	Financials	**-2.35041**	0.16947	0.10150
		Caltex Australia Limited	Energy	**2.65707**	0.07885	0.03282
		Suncorp Group Limited	Financials	**-2.11422**	0.07221	0.05234
	Annual Report	Adelaide Brighton Limited	Materials	**-2.15211**	0.04024	0.02248
		ANZ Banking Group Limited	Financials	**-2.38492**	0.17449	0.10150
		Stockland Stapled	Real Estate	**2.06079**	0.08429	0.06584
	Total	ANZ Banking Group Limited	Financials	**-2.67606**	0.21969	0.10150
		Caltex Australia Limited	Energy	**2.55512**	0.07292	0.03282
2008	Press Release	Downer Edi Limited	Industrials	**-3.10335**	0.12215	0.04083
		Fairfax Media Limited	Consumer Discretionary	**-2.15183**	0.06656	0.04746
		Iluka Resources Limited	Materials	**-2.09716**	0.05763	0.04250
	Annual Report	Iluka Resources Limited	Materials	**-2.30728**	0.06976	0.04250
	Total	Downer Edi Limited	Industrials	**-2.28145**	0.06602	0.04083
		Iluka Resources Limited	Materials	**-2.53264**	0.08406	0.04250
Year	**Relative Emphasis of:**	**Company**	**Industry**	**Standardised Residual**	**Cook's Distance**	**Leverage**

	Press Release	Downer Edi Limited	Industrials	**-3.16203**	0.18038	0.06238
		Iluka Resources Limited	Materials	**-2.00492**	0.04209	0.03301
		Sonic Healthcare Limited	Health Care	**2.17497**	0.03120	0.01648
	Annual Report	AWE Limited	Energy	**-2.40463**	0.08764	0.05161
		GPT Group Stapled	Real Estate	**2.16146**	0.06556	0.04727
2009		Iluka Resources Limited	Materials	**-2.40192**	0.06041	0.03301
		Invocare Limited	Consumer Discretionary	**-2.46526**	0.10432	0.05916
	Total	AWE Limited	Energy	**-2.14222**	0.06956	0.05161
		Downer Edi Limited	Industrials	**-2.47031**	0.11009	0.06238
		Iluka Resources Limited	Materials	**-2.46147**	0.06344	0.03301
		Invocare Limited	Consumer Discretionary	**-2.06058**	0.07288	0.05916
		Sonic Healthcare Limited	Health Care	**1.97162**	0.02564	0.01648
	Press Release	Bank of Queensland Limited	Financials	**2.33127**	0.10240	0.06569
		Iluka Resources Limited	Materials	**-2.97584**	0.08124	0.02800
		Suncorp Group Limited	Financials	**-2.05548**	0.04943	0.03843
		UGL Limited	Industrials	**2.15946**	0.03591	0.02171
	Annual Report	Boral Limited	Materials	**2.07284**	0.08034	0.06517
		Insurance Australia Group Limited	Financials	**-2.12352**	0.11867	0.09124
2010		Ramsay Health Care Limited	Health Care	**1.97007**	0.02312	0.01405
		Suncorp Group Limited	Financials	**-2.36294**	0.06533	0.03843
	Total	Bank of Queensland Limited	Financials	**2.30648**	0.10023	0.06569
		Boral Limited	Materials	**1.99133**	0.07414	0.06517
		Iluka Resources Limited	Materials	**-2.62635**	0.06328	0.02800
		Suncorp Group Limited	Financials	**-2.45155**	0.07032	0.03843
	Press Release	Bank of Queensland Limited	Financials	**2.12091**	0.12362	0.09518
		Breville Group Limited	Consumer Discretionary	**-2.05112**	0.10014	0.08315
		Metcash Limited	Consumer Staples	**-1.97013**	0.02492	0.01630
2011		Perpetual Limited	Financials	**2.04346**	0.14730	0.11879
		Qantas Airways Limited	Industrials	**2.79785**	0.10134	0.04361
		Ramsay Health Care Limited	Health Care	**2.06215**	0.03584	0.02504
		Suncorp Group Limited	Financials	**-2.42577**	0.10784	0.06402

Year	Relative Emphasis of:	Company	Industry	Standardised Residual	Cook's Distance	Leverage
2011	Annual Report	Boral Limited	Materials	**2.03028**	0.02819	0.01815
		Cimic Group Limited	Industrials	**-2.39612**	0.07587	0.04467
		Insurance Australia Group Limited	Financials	**-2.23001**	0.05186	0.03343
		Ramsay Health Care Limited	Health Care	**2.53366**	0.05411	0.02504
	Total	Cimic Group Limited	Industrials	**-1.98811**	0.05223	0.04467
		Ramsay Health Care Limited	Health Care	**2.75640**	0.06404	0.02504
		Suncorp Group Limited	Financials	**-2.30424**	0.09730	0.06402
2012	Press Release	Suncorp Group Limited	Financials	**-2.02562**	0.06135	0.05198
		Transfield Services Limited	Industrials	**2.19532**	0.05453	0.03762
	Annual Report	Monadelphous Group Limited	Industrials	**-2.83088**	0.17566	0.07730
		Ramsay Health Care Limited	Health Care	**2.13617**	0.03781	0.02499
		Sigma Pharmaceuticals Limited	Health Care	**2.08578**	0.05702	0.04481
	Total	Cochlear Limited	Health Care	**-2.16479**	0.03599	0.02237
		Monadelphous Group Limited	Industrials	**-2.00603**	0.08821	0.07730
		Ramsay Health Care Limited	Health Care	**2.01951**	0.03380	0.02499
		Sigma Pharmaceuticals Limited	Health Care	**2.31742**	0.07039	0.04481
2013	Press Release	Credit Corp Group Limited	Financials	**2.51525**	0.10495	0.05885
		Drillsearch Energy Limited	Energy	**-3.34987**	0.21334	0.06773
		GPT Group Stapled	Real Estate	**-2.26607**	0.09504	0.06591
		Pacific Brands Limited	Consumer Discretionary	**-2.02517**	0.04352	0.03542
		Santos Limited	Energy	**-2.17532**	0.07042	0.05239
	Annual Report	Beach Energy Limited	Energy	**2.73481**	0.09521	0.04399
		Senex Energy Limited	Energy	**-2.19562**	0.14686	0.10573
	Total	BWP Trust Ord Units	Real Estate	**2.00140**	0.06828	0.06055
		Credit Corp Group Limited	Financials	**2.56036**	0.10875	0.05885
		Drillsearch Energy Limited	Energy	**-2.79814**	0.14885	0.06773
		Ramsay Health Care Limited	Health Care	**2.00682**	0.03464	0.02701
		Santos Limited	Energy	**-2.24582**	0.07506	0.05239

Year	Relative Emphasis of:	Company	Industry	Standardised Residual	Cook's Distance	Leverage
2014	Press Release	Aveo Group Stapled	Real Estate	**1.97470**	0.04024	0.03551
		AWE Limited	Energy	**-3.14626**	0.10977	0.03867
		Cromwell Property Group Stapled	Real Estate	**2.40090**	0.03037	0.01368
		Downer Edi Limited	Industrials	**-2.03428**	0.03028	0.02277
		Monadelphous Group Limited	Industrials	**-1.98062**	0.09037	0.08309
		Orica Limited	Materials	**-2.48259**	0.03359	0.01450
	Annual Report	ASX Limited	Financials	**-2.57139**	0.03929	0.01670
		Aveo Group Stapled	Real Estate	**2.02688**	0.04239	0.03551
		Credit Corp Group Limited	Financials	**2.67456**	0.09596	0.04798
		Drillsearch Energy Limited	Energy	**-2.56421**	0.05244	0.02562
		Monadelphous Group Limited	Industrials	**-2.04232**	0.09609	0.08309
		Select Harvests Limited	Consumer Staples	**-2.09329**	0.07657	0.06342
		Woolworths Limited	Consumer Staples	**2.46693**	0.14636	0.08650
	Total	ASX Limited	Financials	**-2.45585**	0.03584	0.01670
		Aveo Group Stapled	Real Estate	**2.22232**	0.05096	0.03551
		AWE Limited	Energy	**-2.30119**	0.05872	0.03867
		Credit Corp Group Limited	Financials	**2.43203**	0.07934	0.04798
		Monadelphous Group Limited	Industrials	**-2.23476**	0.11505	0.08309
		Select Harvests Limited	Consumer Staples	**-1.96825**	0.06769	0.06342
2015	Press Release	Adelaide Brighton Limited	Materials	**-1.96955**	0.02886	0.02304
		Cromwell Property Group Stapled	Real Estate	**2.12708**	0.02866	0.01818
		Harvey Norman Holdings Limited	Consumer Discretionary	**-2.42500**	0.06343	0.03717
		Northern Star Resources LTD	Materials	**3.14102**	0.06443	0.01905
		Qantas Airways Limited	Industrials	**2.38436**	0.08130	0.05118
	Annual Report	Cabcharge Australia Limited	Industrials	**-3.02157**	0.08736	0.03212
		Mcmillan Shakespeare Limited	Industrials	**-2.28838**	0.05868	0.03888
		Regis Resources Limited	Materials	**-2.28850**	0.07065	0.04801
		Suncorp Group Limited	Financials	**-3.78065**	0.16795	0.04109
	Total	Cabcharge Australia Limited	Industrials	**-2.50783**	0.06018	0.03212
		Northern Star Resources LTD	Materials	**2.45184**	0.03926	0.01905
		Qantas Airways Limited	Industrials	**2.13387**	0.06512	0.05118
		REA Group LTD	Information Technology	**2.07688**	0.09165	0.07668
		Suncorp Group Limited	Financials	**-3.42079**	0.13749	0.04109

Appendix 16 - Pearson Correlation Matrix of Independent Variables for Research Question 3

	Size (Log Market Cap)	Ownership Concentration	Leverage
Panel A: Total Sample			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.023	1.00	
Leverage	**0.500****	**-0.219****	1.00
Panel B: 2004			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.201	1.00	
Leverage	**0.454****	**-0.324***	1.00
Panel C: 2005			
Size (Log Market Cap)	1.00		
Ownership Concentration	**-0.272***	1.00	
Leverage	**0.524****	**-0.353****	1.00
Panel D: 2006			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.058	1.00	
Leverage	**0.478****	-0.230	1.00
Panel E: 2007			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.004	1.00	
Leverage	**0.429****	**-0.405****	1.00
Panel F: 2008			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.034	1.00	
Leverage	**0.277***	**-0.418****	1.00
Panel G: 2009			
Size (Log Market Cap)	1.00		
Ownership Concentration	0.001	1.00	
Leverage	0.188	**-0.365****	1.00
Panel H: 2010			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.168	1.00	
Leverage	**0.298***	**-0.352****	1.00
Panel I: 2011			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.163	1.00	
Leverage	**0.425****	**-0.407****	1.00
Panel J: 2012			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.123	1.00	
Leverage	**0.433****	**-0.377****	1.00
Panel K: 2013			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.124	1.00	
Leverage	**0.524****	**-0.324****	1.00
Panel L: 2014			
Size (Log Market Cap)	1.00		
Ownership Concentration	**-0.246***	1.00	
Leverage	**0.540****	**-0.331****	1.00
Panel M: 2015			
Size (Log Market Cap)	1.00		
Ownership Concentration	-0.178	1.00	
Leverage	**0.523****	**-0.365****	1.00

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Appendix 17 - Multiple regression analysis of use of impression management tactics as a function of company characteristic – full results including test of significance for all models

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Panel A: Total Sample					
Press Release – Model Reliability: $R^2 = 0.018$, $F(4,759) = 4.470$, $p = 0.001$					
Size	+	0.192	-0.084	**-2.109***	1.228
Ownership Concentration	-	0.007	-0.032	-0.826	1.151
Leverage	+	0.006	0.109	**2.585****	1.372
Good/Bad News Year	+	0.219	0.091	**2.505****	1.016
Constant		1.792		1.931	
Annual Report – Model Reliability (not significant): $R^2 = -0.001$, $F(4,767) = 0.759$, $p = 0.552$					
Total – Model Reliability: $R^2 = 0.013$, $F(4,761) = 3.535$, $p = 0.007$					
Size	+	.366	-.015	-.389	1.222
Ownership Concentration	-	.014	-.070	**-1.809***	1.157
Leverage	+	.011	.058	1.375	1.374
Good/Bad News Year	+	.415	.094	**2.591****	1.016
Constant		3.406		0.751	
Panel B: 2004					
Press Release – Model Reliability (not significant): $R^2 = 0.070$, $F(4,41) = 1.853$, $p = 0.137$					
Annual Report – Model Reliability: $R^2 = 0.233$, $F(4,43) = 4.568$, $p = 0.004$					
Size	+	0.928	0.222	1.516	1.317
Ownership Concentration	-	0.032	-0.023	-0.170	1.122
Leverage	+	0.032	-0.615	**-4.123****	1.366
Good/Bad News Year	+	1.778	0.053	0.410	1.031
Constant		8.477		-0.580	
Total – Model Reliability: $R^2 = 0.165$, $F(4,44) = 3.371$, $p = 0.017$					
Size	+	1.505	0.200	1.338	1.290
Ownership Concentration	-	0.052	0.019	0.138	1.120
Leverage	+	0.052	-0.522	**-3.403****	1.352
Good/Bad News Year	+	2.889	0.097	0.723	1.037
Constant		13.659		-0.619	
Panel C: 2005					
Press Release – Model Reliability (not significant): $R^2 = 0.003$, $F(4,47) = 1.037$, $p = 0.398$					
Annual Report – Model Reliability (not significant): $R^2 = 0.075$, $F(4,46) = 2.016$, $p = 0.108$					
Total – Model Reliability (not significant): $R^2 = -0.002$, $F(4,47) = 0.969$, $p = 0.433$					
Panel D: 2006					
Press Release – Model Reliability (not significant): $R^2 = -0.005$, $F(4,49) = 0.938$, $p = 0.450$					
Annual Report – Model Reliability (not significant): $R^2 = 0.035$, $F(4,50) = 1.484$, $p = 0.221$					
Total – Model Reliability (not significant): $R^2 = 0.002$, $F(4,50) = 1.028$, $p = 0.402$					
Panel E: 2007					
Press Release – Model Reliability: $R^2 = 0.177$, $F(4,49) = 3.841$, $p = 0.009$					
Size	+	1.121	0.399	**2.901****	1.217
Ownership Concentration	-	0.033	-0.367	**-2.629****	1.254
Leverage	+	0.032	-0.133	-0.895	1.427
Good/Bad News Year	+	1.261	0.081	0.636	1.034
Constant		9.983		-2.335	
Annual Report – Model Reliability (not significant): $R^2 = -0.022$, $F(4,49) = 0.719$, $p = 0.583$					
Total – Model Reliability (not significant): $R^2 = 0.086$, $F(4,50) = 2.263$, $p = 0.075$					
Panel F: 2008					
Press Release – Model Reliability (not significant): $R^2 = 0.069$, $F(4,56) = 2.107$, $p = 0.092$					
Annual Report – Model Reliability (not significant): $R^2 = -0.007$, $F(4,58) = 0.891$, $p = 0.475$					
Total – Model Reliability (not significant): $R^2 = -0.003$, $F(4,57) = 0.960$, $p = 0.437$					

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Panel G: 2009					
Press Release – Model Reliability: R^2 = 0.176, F (4,61) = 4.472, p = 0.003					
Size	+	0.638	-0.230	**-1.997***	1.047
Ownership Concentration	-	0.030	0.192	1.560	1.193
Leverage	+	0.021	0.485	**3.913****	1.212
Good/Bad News Year	+	0.891	-0.142	-1.248	1.024
Constant		6.145		1.072	
Annual Report – Model Reliability: R^2 = 0.150, F (4,60) = 3.821, p = 0.008					
Size	+	0.631	-0.282	**-2.377****	1.057
Ownership Concentration	-	0.029	0.048	0.385	1.164
Leverage	+	0.021	0.419	**3.314****	1.206
Good/Bad News Year	+	0.872	-0.127	-1.092	1.019
Constant		6.074		1.812	
Total – Model Reliability: R^2 = 0.217, F (4,59) = 5.378, p = 0.001					
Size	+	1.082	-0.305	**-2.664****	1.055
Ownership Concentration	-	0.050	0.170	1.394	1.200
Leverage	+	0.036	0.506	**4.094****	1.228
Good/Bad News Year	+	1.527	-0.181	-1.597	1.030
Constant		10.409		1.782	
Panel H: 2010					
Press Release – Model Reliability: R^2 = 0.217, F (4,62) = 5.584, p = 0.001					
Size	+	0.720	0.079	0.682	1.130
Ownership Concentration	-	0.029	0.496	**4.233****	1.156
Leverage	+	0.020	0.361	**3.025****	1.201
Good/Bad News Year	+	1.036	0.138	1.240	1.041
Constant		7.247		-2.180	
Annual Report – Model Reliability (not significant): R^2 = 0.063, F (4,62) = 2.108, p = 0.090					
Total – Model Reliability: R^2 = 0.140, F (4,62) = 3.697, p = 0.009					
Size	+	1.368	0.069	0.570	1.131
Ownership Concentration	-	0.055	0.376	**3.073****	1.150
Leverage	+	0.038	0.361	**2.886****	1.201
Good/Bad News Year	+	2.026	0.002	0.018	1.038
Constant		13.723		-1.694	
Panel I: 2011					
Press Release – Model Reliability (not significant): R^2 = 0.029, F (4,60) = 1.471, p = 0.222					
Annual Report – Model Reliability (not significant): R^2 = -0.044, F (4,63) = 0.291, p = 0.883					
Total – Model Reliability (not significant): R^2 = 0.022, F (4,64) = 1.387, p = 0.248					
Panel J: 2012					
Press Release – Model Reliability (not significant): R^2 = 0.31, F (4,68) = 1.575, p = 0.191					
Annual Report – Model Reliability (not significant): R^2 = 0.076, F (4,67) = 2.453, p = 0.054					
Total – Model Reliability: R^2 = 0.132, F (4,66) = 3.650, p = 0.010					
Size	+	0.962	0.093	0.718	1.364
Ownership Concentration	-	0.041	-0.181	-1.475	1.214
Leverage	+	0.030	-0.081	-0.611	1.420
Good/Bad News Year	+	1.145	0.378	**3.169****	1.148
Constant		9.458		-0.366	
Panel K: 2013					
Press Release – Model Reliability (not significant): R^2 = -0.025, F (4,69) = 0.549, p = 0.700					
Annual Report – Model Reliability (not significant): R^2 = -0.002, F (4,72) = 0.957, p = 0.437					
Total – Model Reliability (not significant): R^2 = 0.069, F (4,69) = 2.357, p = 0.062					

	Predicted Sign	Standard Error	Beta Coefficient	*t* value	VIF
Panel L: 2014					
Press Release – Model Reliability (not significant): R^2 = -0.016, F (4,77) = 0.690, p = 0.601					
Annual Report – Model Reliability (not significant): R^2 = 0.068, F (4,76) = 2.458, p = 0.053					
Total – Model Reliability (not significant): R^2 = -0.004, F (4,77) = 0.929, p = 0.452					
Panel M: 2015					
Press Release – Model Reliability (not significant): R^2 = -0.042, F (4,76) = 0.192, p = 0.942					
Annual Report – Model Reliability: R^2 = 0.072, F (4,77) = 2.579, p = 0.044					
Size	+	0.647	0.181	1.341	1.591
Ownership Concentration	-	0.023	0.246	**2.141***	1.151
Leverage	+	0.019	0.105	0.792	1.532
Good/Bad News Year	+	0.675	-0.109	-0.932	1.202
Constant		6.125		-1.875	
Total – Model Reliability (not significant): R^2 = -0.010, F (4,76) = 0.808, p = 0.524					

[a] Reported *t* values are one-tailed for variables with a directional prediction and two-tailed otherwise.

* Significant at the 0.05 level

** Significant at the 0.01 level

Appendix 18 - Outliers eliminated in univariate t-tests – Research Question 4

Year	Relative Emphasis of:	Company	Industry	Z Score
2008	Press Release	Downer Edi Limited	Industrials	**-3.03283**
2012	Annual Report	Monadelphous Group Limited	Industrials	**-3.00217**
2013	Press Release	Drillsearch Energy Limited	Energy	**-3.47892**
	Total	Drillsearch Energy Limited	Energy	**-3.15117**
2014	Press Release	AWE Limited	Energy	**-3.26904**
2015	Press Release	Northern Star Resources LTD	Materials	**3.22462**
	Annual Report	Cabcharge Australia Limited	Industrials	**-3.29849**
		Suncorp Group Limited	Financials	**-3.43344**
	Total	Suncorp Group Limited	Financials	**-3.30479**

Note: No outliers were identified for the univariate t-tests on impression management of non-GAAP and GAAP figures reported in Tables 7.8 and 7.9.